Livebearer News

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BRITISH LIVEBEARER ASSOCIATION

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Data Protection Act

In order to comply with the requirements of the Data Protection Act, we need to inform members that their name, address, email address and telephone number are being maintained on a database, the purpose of which is for the distribution of the Association's magazine and to inform members of forthcoming events. This information will not be provided to any other organisation for any purpose whatsoever without prior consultation. The association agrees to remove any details at a member's request.

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Editorial

I must start this editorial with some “thank-yous”. Thank you to Dr John Lyons for his article about the leopard splitfin, *Xenotaenia resolenae*; thank you to Kees de Jong for giving me permission to use his article about *Heterophallus milleri*, which first appeared in “Poecilia Nieuws”; and thank you to Dan Fromm for his article about the origins of the black molly. Indeed, thanks are due to Dan for getting in touch with me and offering his thoughts on articles which have appeared in “Livebearer News” and his offer to send me more articles. Both he and I know how difficult it is to keep on finding fresh articles which have not been published before. So this is an appropriate time for me to ask all of you to get writing. Any topic ! Any livebearer ! Don’t worry about spelling etc – I will sort out that sort of thing in my role as editor.

And then a rather sarcastic – “Thanks for that” to Google, for removing “Google Translate” from my phone when I wasn’t looking. In the past I have been able to use articles from the French, German and Dutch livebearer digital magazines rather easily thanks to Google translate but now it has disappeared! All the more reason for you the members of the BLA to write about you own experiences – PLEASE!

Chair’s End of year report

2022 has been a good year for the BLA, membership has steadily grown in recent years and we have now got over 120 members currently within the club, this is a monumental achievement in the present climate. The reason for this achievement is largely down to the successful events we have held and the public promotion of the club through social media. It has to be said that without hard yards the committee have put in, we wouldn’t be thriving in the way we are at the moment. Please remember that all your committee members are volunteers and do this for the love of the hobby, **Well done everyone, thank you.**

We have also had a good year raising money for good causes, The Spring show saw donations of £100 to the air ambulance (the favoured charity of the Braunston WMC, who donated the room to us FOC), £100 to Cancer research (In memory of ‘Ollie’ Hardy of the SVAS club) and £300 to the Xiphophorus working group. The Summer show in Basingstoke also raised £50 for Tropiquaria. **Again, a great effort and my heartfelt thanks to all who attended these shows and helped to make these donations possible.**

So, what can you expect from us in 2023?

The unfortunate loss of the Braunston WMC has caused a bit of a rethink on our plans for next year. To change things around a bit we are adding two new events, Bristol in April and Carlisle in July. The reason we have chosen these locations is to help provide social events for the members who, purely down to geography, find it difficult to get to our usual shows and auctions. We are hoping they are successful and become a regular part of our calendar.

The summer show in Basingstoke has been booked for the 18th June 2023 and I would like to thank the Association of Aquarists for their help and generosity in booking and covering the costs of the hall for us. This year's auction was very successful and although the livebearer show in its first year didn't hit the heights we were hoping for, it did show enough promise for us to try again in 2023.
The Extravaganza has for the previous two years been part of a larger event hosted by an amalgamation of ourselves and other national associations. These events for the last two years have been held at the Holiday inn, South Normanton. This venue, although outstanding, has proved to be too expensive for us to continue using. A further problem we have also encountered is that the date we used clashed with an annual event hosted by the Catfish Study Group.
This year we are again helping to organise this event and our remit is to find a more cost-effective venue and a new date. This is very much in the planning stage at the moment with several venues currently under consideration.
As you can imagine the planning for these shows take a while to get organised. We will of course release any new information we have on these events as soon as we can through BLA Bites and the subsequent newsletters.

The membership part of the website has been upgraded this year. Please bear with us as we haven't got this working as we would like at the moment. We are looking in to it and will keep you upto date on all progress made. If you do have chance to log in to the website, please do so and have a look around and let us know how you get on. All constructive points can be discussed by the committee and acted upon accordingly.

Please contact me with any questions you have about the club, events, membership etc and I will try to address them.
Have a great Xmas and a happy New Year.

Steve Oliver
BLA Chair
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NEWS FROM GOODEID COUNTRY

By John Lyons

We often think of Goodeids as "subtropical" fishes that prefer slightly cooler water than true tropical species such as Guppies, Cichlids, Tetras, and Barbs. While many Goodeids do prefer water temperatures in the low 70's, 5-10 degrees below what you'd maintain for a tank of fancy Guppies, there's actually a lot of variation in the temperature preferences of the various species. For example, the Darkedged Splitfin (*Girardinichthys multiradiatus*), which lives at elevations from 6,500 to 9,500 feet where it rarely gets hot, likes temperatures in the 60's and can tolerate water just above freezing. At the other extreme, a few Goodeids are truly tropical, and they thrive at temperatures into the upper 80's. One of my favorites in this group is the Leopard Splitfin *(Xenotaenia resolanae)* (Photo 1, 2), and here I'll share a little about what I've learned about this species in its native habitat over the last 35 years.

Leopard Splitfins have a restricted range. They occur only in the upper reaches of two small river systems in the state of Jalisco that drain into the Pacific Ocean south of Puerto Vallarta, the Purificación and the Marabasco. They are found at lower elevations than most other Goodeids, from 1,000 to 3,500 feet, where the weather never gets cold. Leopard Splitfins occupy shallow pools in streams and small rivers, avoiding fast turbulent areas (Photo 3). They can live in small creeks (Photo 4), where they are often the only fish species present, up to medium-size rivers (Photo 5), where they may share their habitat with several other livebearers such as the Dwarf Molly (*Poecilia chica),* Golden Livebearer *(Poeciliopsis baenschi),* Blackspotted Livebearer *(Poeciliopsis turneri)* [Purificación system only] and Goldbreast Splitfin *(Ilyodon furcidens)* [Marabasco system only], Mountain Mullet *(Agonostomus monticola),* Multispotted Goby *(Sicydium multipunctatum),* and non-native Tilapia *(Oreochromis species).*

Historically, the watersheds with Leopard Splitfins were mostly covered with seasonally dry tropical forest, a habitat that was once common along the Pacific coast from central Mexico through southern Central America. Nowadays much of this forest has been cut down and replaced by agriculture, particularly sugar cane cultivation and cattle grazing, to the detriment of the rivers and their fishes. Habitat loss is an ongoing and increasing threat. Segments where the banks have been cleared for grazing or planting have often lost their Leopard Splitfins, and the species does best where at least a thin riparian corridor of trees or bushes remains. Water diversions for irrigation have nearly eliminated flows in some stream reaches in the dry season, with obvious negative impacts on fish and other aquatic organisms (Photo 6). Runoff of excess nutrients and pesticides from cultivation and manure from livestock facilities pollute other stream reaches. Recently, ill-conceived stream dredging and straightening projects for flood control have all but eliminated fish habitat on several rivers (Figure 7). Fortunately, the upper Purificación and Marabasco drainages are protected in the Sierra de Manantlán Biosphere Reserve, and streams with good habitat and clean water remain there (Photo 8).

The Leopard Splitfin is a medium-sized Goodeid, reaching a maximum size of 3 inches. Maturity occurs at about 1.5 inches at an age of 8-10 months. Maximum age in the wild is unknown but is probably 3 or 4 years. Diet has not been investigated, but based on morphology, the Leopard Splitfin looks to be primarily carnivorous, eating mainly aquatic insects and crustaceans in nature. But like most Goodeids, it likely also consumes some

algae and detritus. In captivity under constant conditions, the species is capable of breeding year-round, but in the wild reproduction has only been documented from late January through March during the dry season, which runs from October through May. Whether significant reproduction occurs at other times of the year is unstudied. Brood size in the wild appears to be 5 to 20, with larger females having more offspring. In captivity the record brood size is 31. Offspring are relatively large at birth, often more than 0.5 inches.

Figure 1 A male Leopard Goodeid from the Río Cuzalapa (Marabasco basin), January 2006.

Figure 2 A female Leopard Goodeid from the Arroyo Conejo (Purificación basin), January 2013.

Figure 3 El Río Resolana (Purificación basin), January 2015, the “type locality” for the Leopard Splitfin, the place where in 1939 the specimens were collected that were used to describe the species in 1946. The species still remains common at this locality.

Figure 4 Leopard Goodeid habitat in the small Arroyo Conejo, January 2013.

Figure 5 Leopard Goodeid habitat in the larger Río Cuzalapa, January 2006.

Figure 6 Dr. Sonia Navarro-Pérez standing on the almost-dry riverbed in a reach of the Río Cuzalapa from which nearly all the flow had been diverted for irrigation, March 1986. 8

Figure 7 A stretch of the Río Tecolote that had been straightened and dredged for flood control, eliminating what had been good habitat for Leopard Goodeids, January 2013.

Figure 8 The Sierra de Manantlán Biosphere Reserve, which protects Leopard Goodeid habitat in the headwaters of the Purificación and Marabasco basins, January 2013.

As I mentioned initially, the Leopard Splitfin is one of the most tropical of the Goodeids, occupying warmer water than most other species. During the winter, December through February, water temperatures may drop briefly into the low 60's [16 to 18 C] during cold spells but are usually in the high 60's or low 70's. Spawning in the wild has been documented when average water temperatures are in the 70's, but likely occurs into the lower 80's as well. During the hottest time of the year, which is at the end of the dry season in May, some Leopard Splitfin populations may experience temperatures in the high 80's. [I.e. over 30 C.]

The benign climate of the habitat of Leopard Splitfins makes collecting them in the wild particularly enjoyable. It's always short-sleeve weather, and most of the time (unless electroshocking is involved), wading boots aren't necessary. In forested areas, the vegetation is green and lush. Parrots are often heard squawking as they fly overhead. Sometimes tarantulas can be seen on the path along the stream (Photo 9), and once we caught a basilisk lizard (Photo 11), famous for being able to run across the surface of the water on its large widely splayed feet, that had become trapped in a cattle watering structure along a stream. My best wildlife sighting came when I was examining our catch next to a brushy bank and I looked up and noticed two 5-foot-long boas deep among the branches (Figure 10). Seeing them was almost as exciting as the net full of Leopard Splitfins and other livebearers I was holding.

Although Leopard Splitfins still remain common at a few spots, their trends in distribution and overall abundance are downwards, and they are vulnerable to extinction. Captive breeding and maintenance by aquarists are important components of their long-term conservation. Several ALA members have this species, all derived from a collection made back in 1976, and it's often available at Goodeid Working Group events. If you're interested in an attractive Goodeid that likes warm water, I'd highly recommend giving the Leopard Splitfin a try.

Figure 9 Tarantula from along the Río Purificación, November 1991.

Figure 10 Northern Boa from along the Río Resolana, January 2015.

Figure 11 Basilisk Lizard from along the Rio Tecolote, March 1986.

Snippets

1. Brine shrimp. We all know that they are the finest of foods for livebearer fry, don't we? And we all know how to hatch them out, don't we? Adult fish love them also, and they help to bring fish into breeding condition. But what if you have more than just a few tanks of fish. Well, you need more than one brine shrimp hatchery on the go, obviously. I personally run two brine shrimp hatcheries. ["Hatcheries" being a pretty fancy term for a plastic bottle with airline tubing blowing air through the salt solution / eggs.] But how do you time the process? During the summer, when the temperatures in my fish room reached over 30°C, the brine shrimp eggs hatched in less than 24 hours and it was enough to set the t hatcheries off on alternate days. Now, with the weather being cooler and a new container of brine shrimp eggs, it is taking three days for the eggs to hatch properly and I keep ending up with a glut of newly hatched brine shrimp or none at all. So what do you do? How do you keep a continuous supply of newly hatched brine shrimp available for your fish? Please let me know so that I can copy you.

2. *Phallichthys tico*. I was turning them out in numbers until I went on holiday in May. I was away for ten days and they didn't get fed for all that time. Big mistake! I came back to find all the fry had disappeared and no more fry have been born since then. None at all. Breeding just stopped dead. And today I lost the last one. The moral of the story seems to be that the very small livebearer species need to be fed even if you are away. But what do you do? Do you get someone to come in to feed your fish? Do you have an automatic feeder? Please let me know so that I can copy you.

3. *Skiffia.* I have been interested in the genus *Skiffia* since I first read about *Skiffia francesae* becoming extinct soon after it was discovered. About twenty years ago I kept some *S. francesae* that were given to me by Chester Zoo aquarium. They did breed but were infected with fish TB and I lost the species after a few years. For some years now I have been keeping and breeding *S. multipunctata* and *S. sp* V188 "Sayula". I took two pairs of the *S.* "Sayula" and one pair of the *S. multipunctata* to the auction at the "Extravaganza". I did all the things that are recommended : starved the fish for a few days before bagging them up, using fresh water to bag them, etc - and still lost all the females before the auction! Talking to Michael Kock about the Skiffias was interesting. He told me that the Mexican biologists were having trouble with the re-introduction of *S. francesae* in to the Rio Teuchitlan because the fish were very sensitive to nitrates. *S. francesae* and *S. sp* "Sayula" are obviously very closely related. Could it have been a high concentration of nitrates that killed my female *Skiffia*? I would be interested to know what you think.

4. Snails. I never used to mind them. If you accidentally over-fed your fish they would eat the surplus, right? So the fact that all my tanks had snails in them didn't bother me. And then I started to get interested in aquatic plants as well as fish. And the snails just ate them. I have been taking out every snail that I see from the planted tanks but there always more. I don't want to use chemical means to eradicate them. Has anyone out there used the predatory snails to get rid of an infestation? Did it work? Please let me know so that I can copy you.

5. “Sod’s law”
I keep *Xiphophorus nezahualcoyotl*, which most of us refer to as “nezzies”. They bred quite well last year but all the young seemed to be female. Then when the weather warmed up in the early summer three of them developed swords and gonopodia so at last I had some males. I sold a trio of one male and three females at the “Extravaganza” and then, you guessed it, the other two males have just died [writing in mid-October]. Sod’s Law indeed. So, has anyone out there got a male that I could buy? Please! I will gladly come and get it from you.

6. The American Livebearer Association held a joint event with the American Cichlid Association, the American Killifish Association and the Australia & New Guinea Fishes Association together with the American fancy guppy group. I had an email from John Lyons, of the North American branch of the Goodeid Working Group and this is what he reported about their auction :-

We had a big livebearer auction that raised a lot of money ($7000) for GWG and for graduate student research. Everything sold for very high prices. I'd say the average was about $35/pair, with many goodeids (*Allodontichthys polylepis,* various *Characodon* populations, *Girardinichthys viviparus*) going for over $100 and one poecilid (whose identity I forgot) at $310. Fish that we were giving away free to newbies pre-pandemic to get them interested were selling last weekend for $40-50/pair. Good for fund raising but discouraging for those on a budget or just getting started. I was outbid for several fish I was interested in (mainly *Skiffia multipunctata*, which went for ~$70/pair). I did get one pair of *Xenotaeinia resolanae* at $36/pair and I picked up some *Ameca splendens* via trades. I think the high prices were in part due to pent-up demand from the pandemic, and I hope prices drop a bit over time.

Maybe we should be thankful that prices do not go so high in the auctions we hold in the UK or maybe we should consider that we undervalue our fish.
What do you think?

Bits and Pieces

Does anyone out there know Dave Maley? If you do know him, have you got his email address so that we can get in touch with him, please? If you email me at the usual address then I will contact Dave. Thanks.

Report on the "Fishkeepers Extravaganza", 17th & 18th September

Once again, I really enjoyed the "Fishkeepers Extravaganza", at the Holiday Inn, South Normanton, Derbyshire. It was great to meet up with the other committee members face-to-face instead of via a "Zoom" meeting; it was great to se Michael Kock (the BLA's guest speaker and leader of the European chapter of the Goodeid Working Group) again; it was great to be able to meet and chat to friends made at last year's Extravaganza and previous BLA meetings and it was great to see lots of different fish from lots of different families. The unexpected bonus was being able to listen in on conversations between highly experienced fish-keepers. The one that sticks in my mind was the conversation between Michael and Alex Cliffe (who used to run the aquarium at London Zoo and now is in charge of the aquarium at Whipsnade). They were talking about the conservation of fish in general and of *Goodeids* and *Aphanius* killifish in particular and the challenges and problems in places like Turkey and Mexico. It was fascinating stuff and highlighted just how much fishy knowledge some people have.

We held the AGM on the Saturday morning and during that the new constitution was voted in unanimously. A big part of the discussion was a schedule of events for next year. There were many suggestions but the important question is :- Where would **YOU** like to see shows / auctions held next year? Please get back to me with suggestions on this. John Fish was voted in as Membership Secretary and most BLA members will be hearing from him at some point in the future.

There were a whole series of talks held during the Saturday. I was busy for some of the time but managed to attend a talk about West African cichlids, another one given by Brian Downing, the new Chairman of the British Cichlid Association about collecting Central American cichlids but unfortunately only caught part of the talk given by Mike Balzer, of "Shoal" about freshwater fish conservation. This was followed by Alex Cliffe talking about the problems and conservation of *Aphanius* killifish in Turkey. Next came the forum, again with an emphasis on conservation. Again, I missed a part of this but the bit that I did catch was interesting and thought-provoking. The point was made that the *Skiffia francesae* fish that were the start of the captive breeding for re-introduction in Mexico came from private individuals and zoos in Europe and America. Saving a fish species can be done for a few thousand pounds and we could save many species of freshwater fish for a relatively small sum of money. Compare this with the millions of pounds spent on conserving the tiger. The final talk was from Michael Kock about the Rio Atoyac in Mexico and the *Xiphophorus* and *Rivulins* found there.

The auction was held on the Sunday and was well-attended. There were a lot of fish for sale and I could have easily bought enough to fill my fish room several times over. The prices fetched stayed curiously low with many real bargains to be had. The highest price of any lot in the auction was £95 for a group of *Corydoras boesmani* that had two people bidding furiously against each other. The highest price for any livebearers [that I remember – please correct me if I am wrong] was £25 for a pair of *Characodon audax*. They were selling for more than twice as much as that at Basingstoke. I remember a pair of *Characodon lateralis* that sold for only £13 and I picked up two pairs of *Neotoca bilineata* for only £5 a pair. There were plenty of other livebearers that sold for less than £10 a pair.

Getting ready for the auction

A Facebook post from Erwin Radax [Erwin is a friend, an important member of the Goodeid Working Group and an excellent fish-keeper.]

Researchers have studied natural hybrids between two *Xiphophorus* species (*X. birchmanni* x *X. malinche*) along the Río Calnali in Hidalgo, Mexico, for decades but have recently discovered three-way hybrids between distantly related swordtail fish lineages (*X. variatus* x *X. birchmanni* x *X. malinche*) at that location. The researchers' present hypotheses for what drove this hybridization event including anthropogenic pollutants and reduced water quality.
Preprint (direct PDF) - https://www.biorxiv.org/.../2022.10.08.511445v1.full.pdf
"As sequencing tools have advanced, we have found that barriers between animal species are more porous than once thought. Researchers have found evidence for hybridization between species throughout many branches of the tree of life. In some cases, these hybridization events can involve more than two species.
Here, we develop a flexible and user-friendly tool that can be used to identify three-way hybrids and report the discovery of hybrids with ancestry from three swordtail (*Xiphophorus*) species from an anthropogenically impacted site on the Río Calnali in Hidalgo, Mexico. Researchers have studied hybrids between two *Xiphophorus* species along this river for decades, but this is the first documented case of hybridization involving three species. We explore hypotheses for what drove this hybridization event, including anthropogenic pollutants and reduced water quality."

Research Title

Complex hybridization between deeply diverged fish species in a disturbed ecosystem

Citation

Complex hybridization between deeply diverged fish species in a disturbed ecosystem. Shreya M. Banerjee, Daniel L Powell, Benjamin M Moran, Wilson F Ramirez-Duarte, Quinn K Langdon, Theresa R Gunn, Gaby Vazquez, Chelsea Rochman, Molly Schumer. bioRxiv 2022.10.08.511445; doi: https://doi.org/10.1101/2022.10.08.511445

Image

Example of a first-generation hybrid individual with 50% $X.\ variatus$ ancestry, 23.8% $X.\ birchmanni$ ancestry, and 26.2% $X.\ malinche$ ancestry. This individual has a short sword, a trait that is unique to $X.\ malinch$, and large dorsal fin characteristic of $X.\ birchmanni$, and an overall body shape and vertical barring characteristics of $X.\ variatus$.

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#Xiphophorus #Livebearers #PlatyFish #Platy #Swordtails #Poeciliidae

Editor's comment

I used the link above to look at the whole of this paper and although I found it interesting, there were passages that I just didn't understand. I would encourage anyone with any interest in Xiphophorus species to look at the paper via the link above, not least because of the photo and diagrams that illustrate the article and which would not copy when I tried.
I don't think that I have broken any copyright regulations by including the above but if I have then I apologize.

An appeal

Would you like to get more involved in the BLA? Would you like to join the committee? We are always looking for more people to get involved in running the BLA – the more people involved the better the job that we can do. In particular, the post that we most need to fill at the moment is that of membership secretary. If you would like to get involved, whether in the role of membership secretary or any other role, including that of general committee member, then please contact either me or our chairman, Steve Oliver. Our email addresses are on Page 2.

Poecilia Nederland : -

Atlas van levendbarende zoetwatervissen

[Very kindly sent to me by Kees de Jong and first published in “Poecilia Nieuws”, the newsletter of Poecilia Nederland.]

Heterophallus milleri Radda, 1987

English name: Grijalva Gambusia.
Size: males 3 cm and females 3,5 cm.
Temperatuur: 24 -28°C. This is a warmth-loving species that seems to tolerate lower temperatures over a longer period.
Distribution: Río Teapa, Río Tacotalpa, Río Grijalva river basin in the Mexican state of Tabasco.

Remarks:
An attractively coloured species from this genus, which is related to the Gambusias. The fish have a beautiful pastel-coloured body in the right light. The dorsal fin of the male is brightly coloured and variable in the dominant males. In addition to a black spot, some males have a distinctive white spot. The tail is yellowish with a solid yellow spot on the underside. The colours are less intense in the females and the sub-dominant males.

H. milleri is a schooling fish. Their lively behaviour is only clearly visible when they are kept in a larger group.
When the males are not swimming after the females, they are trying to keep their competitors away from the females.
To keep a group of these lively fish, an aquarium of at least 60 x 30 x 30 cm is necessary. The fish live in the upper water layers. Some current in the water is appreciated. Planting is necessary to give the fish the opportunity to withdraw from the group from time to time. They are peaceful fish that can be kept together with other peaceful aquarium inhabitants that live in the lower water layers.

The distribution area in Tabasco

Female *H. milleri* Photo : *Marco Goeman*

This species grabs its food from the surface of the water with its upturned mouth. They will eat everything but have a clear preference for animal food. This can consist of live food in the aquarium, but frozen food is also eaten. Although we have not tried it, small fruit flies seem to be perfect food for these surface dwellers.
The species is not easy to breed. The newborn fry are only 5mm long at birth and are quickly eaten by the adult fish. Even if there are many plants, the fry do not stand a good chance of surviving the first few days. They must be caught immediately or the females must be isolated in time. Do not use a very small container for this, but give the females plenty of space. Otherwise there is a good chance that the female will give birth prematurely.

The biggest brood of young that we had was eleven fry. A female might possibly give birth to up to 20 young. It also turns out that not all the young will be viable. However, the healthy fry eat well and can be fed with small live food and fine dust dried food right away. If the water is changed regularly, the fry grow quickly and are about 22mm after 40 days. They can then be placed in the school with the larger fish. If you want to keep feeding them in a targeted way, you can keep them separate for a while longer. They are sexually mature about a month later.
Heterophallus milleri is not very productive and breeding and propagating them requires a lot of attention. Moreover, the question is whether the species can be kept in the aquarium for several generations. Earlier imports disappeared from the aquariums again after a few generations. Hopefully, it will be possible to keep this beautiful species, as it is well worth the effort of keeping.

Text : Marco Goeman and *Kees de Jong*

Photos : Marco Goeman

Black molly origin myths

Dan Fromm

Sailfin mollies have been in the hobby, at least in the U.S., nearly forever. To learn more about *Poecilia latipinna*, the United States' native sailfin molly and the first one to be kept by aquarists, see Clapsaddle 1981, which reports on ecology and behavior of the wild sailfins Mr. Clapsaddle collected in southern Texas. Rowley 1947 gives good but slightly outdated advice on husbandry of black sailfins.

Black mollies have been around, it seems, for nearly a century. Rowley 1947 remarks that black sailfin mollies have been growing more popular "during the past twenty years" and gives a brief account of the origin of one strain developed from wild *Poecilia latipinna* by William Schaumberg of Crescent Fish Farm in New Orleans. Sternke in Axelrod 1956 mentions those fish and explains how he bred another more commercially appealing line of black sailfins starting from a different wild *latipinna* population. After black sailfins were developed they were crossed with other species of sailfin mollies and with shortfin mollies, e.g., *P. "sphenops*," to make the black molly hybrids that are now common in the hobby.

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European aquarists have different black molly origin myths. Meyer, Wischnath and Foerster 1985 remark that the first black mollies arrived in Germany in 1930. They regard the origin story of the black mollie as somewhat dubious. They suggest it might have developed from crosses between *P. sphenops* and *P. formosa*, then remind us that this is impossible. They also said that "Crescenty" crossed various lines of *P. sphenops* and then bred selectively to create the black molly. Schäfer 2022 stated (my translation) that "The original Black Molly was developed by the breeder Crescenty from New Orleans, allegedly in 7-years of selective breeding from '*Mollienisia formosa'.*" Again, this is impossible.

I believe, can't prove, that the Germans somehow converted Crescent Fish Farm into the surname Crescenty. A misunderstanding and a typographical error would have done it.

Balsano, Rasch & Monaco 1989 explain why crossing other *Poecilia* species with *P. formosa* is impossible:

P. formosa is a diploid unisexual of hybrid origin, one of several unisexual vertebrates that reproduce by gynogenesis. Sperm from a related bisexual species are needed to initiate development of eggs but inheritance is strictly maternal.

Hubbs 1933 explained how the confusion between *P. sphenops* and *P. formosa* arose:

In responding to requests for an article on the species and hybrids of *Mollienesia*, I want first of all to ask my readers to do some quick forgetting. A more-than-usual number of errors have in one way or another crept into the general understanding of the species of *Mollienesia*, and of their breeding behavior.

This the name *Mollienesia sphenops* is often applied by aquarists to the black sport or melanistic mutation of *Mollienesia latipinna*, whereas *Mollienesia sphenops*, as indicated below, is a distinct species which is normally not black.

The hybrid between *latipinna* and *sphenops* has been named *Mollienesia formosa*, but to make matters worse this name *formosa* has been wrongly used. Thus the eminent German aquarist Rachow figured typical *sphenops* under the name *formosa*, while the great English ichthyologist Regan applied that abused name to *latipinna* from Tampico and also to *sphenops* from Panama. Presumably neither Rachow nor Regan ever saw the true *formosa*, which is in a way also a misstatement, since that name was based on a hybrid.

Another misconception, apparently less general, is that the magnificent species *Mollienesia velifera* is merely the better developed individuals of *Mollienesia latipinna*.

To detail the mistakes of ichthyologists in attempting to build up a sound classification of the species of *Mollienesia* would carry us too far away from our common interests, and would consume more pages than the editor would spare. Suffice it to say that the fish scientists have blundered even more than the fish fanciers.

Blanc 2022, reporting on finding a black-spotted *sphenops* type in the field and on selective breeding to produce very attractive variably black fish, (my translation) wrote:

> All aquarists know the Black Molly, the entirely black *Poecilia* found in the hobby since the 1960s. Several fancy forms are in the pet trade, lyretail, gold dust, speckled and so on. And even sailfin Black Mollies obtained by crossing with *Poecila latipinna*.

Farther on in his article, Blanc makes it clear that he believes the black molly was developed from Mexican shortfin mollies. This is the justification, not that one was needed, for the 2011 trip to Mexico he reports on in his 2022 article.

All of this tends to confirm my deeply held beliefs that everyone makes mistakes and that correcting errors is very difficult. Ineradicable errors were a problem long before the Internet was created.

There are many wild populations of *P. latipinna* that might be used as starting points for black sailfins. For example, Axelrod 1956 mentions a wild *latipinna* with good potential:

> Dr. Charles M. Breder has captured huge black spotted specimens fairly far out in the ocean off the coast of Florida. The specimens were 80% black and had red-orange margins on the leading edge of the male's dorsal fin.

Clapsaddle 2013 discusses briefly yet another way to make black sailfins. He crossed commercially available fancy mollies with wild *P. latipinna*, got some black sailfins and then bred selectively. He also crossed his black "*latipinna*" with wild *P. velifera* and *P. petenensis* followed by more selective breeding to fix the genes for blackness in the hybrids.

The black molly has multiple conflicting origin myths, some nonsensical. Two independent origins are fairly well documented. There may well have been other undocumented ones. The moral of all this is we should be very careful when trying to explain how the black molly came to be.

References:

Axelrod, H. 1956. Mollies as pets. T.F.H. Publications. Jersey City. 24 pp. https://archive.org/stream/Mollies_As_Pets_/Mollies_As_Pets__djvu.txt

Balsano, J. S., E. M. Rasch and P. J. Monaco. 1989. The evolutionary ecology of *Poecilia formosa* and its triploid associate, pp. 277-297. In G. K. Meffe and F. F. Snelson, Jr (eds.), Ecology and Evolution of Livebearing Fishes (Poeciliidae). Prentice Hall, Englewood Cliffs, NJ.

Blanc, J. 2022. *Poecilia aff. sphenops* "Pichucalco, JK Mexique 2011". Le Vivipare 147 – Juin 2022. 4-11.

Clapsaddle, C. 1981. *Poecilia latipinna*. Livebearers 58:3-4. Livebearers is available online to members of the American Livebearers Association.

-- 2013. https://goliadfarms.com/black-sailfin-molly/

Hubbs, C. L. 1933. The Aquarium 1. (1): 263-268, 277. http://www.nativefishlab.net/library/textpdf/20006.pdf

Meyer, M. K., L. Wischnath and W. Förster. 1985. Lebengebärende Zierfische Arten der Welt. Mergus Verlag. West Germany. 496 pp. ISBN 3-88244-006-6

Schaefer 2022. Wer kennt das Volk der Mollienser? https://www.aqualog.de/blog/wer-kennt-das-volk-der-mollienser/

For sale and Wanted

Our Chairman, Steve, has been contacted by David Ferry, of Mansfield Aquatics, who says that he is looking for livebearers, of all varieties. Hw would like to source them from Britain as he has been plagued with "issues" importing them from Sri Lanka. If you have surplus livebearers that you would like to sell [and you don't want to wait for the next BLA auction to sell them] then you could try contacting David. His details are below :-

Looking for livebearers, all varieties.
David Ferry
Mansfield Aquatics Ltd
191 Southwell Road West
Mansfield
NG184HF
01623 428020

Also wanted : - Do you keep any of the unusual *Limia*?
Steve has been contacted by Peter Petersen, who is the Head of Animal Department, National Aquarium, Denmark, who writes :-

"I am searching for these species for a conservation project at National Aquarium Denmark. I really hope that you can help me out here.
Limia rivasi
Limia sulphurophilia
Limia mandibularis
Limia grossidens
Limia immaculata
Limia miragoanensis
Limia ornate
Limia fuscomaculata
Gambusia beebei.

I realize that this is a bit of a long shot as I had never even heard of some of these species and only ever seen the *L. grossidens* but if you do keep any of these species and you can spare some to help with the conservation project then please contact Peter. His email address is :-
ppe@denblaaplanet.dk
Anything we can do to help with conservation is a good thing, in my opinion.

Do you keep *Anableps?* If anyone out there is keeping or breeding *Anableps* then will you please get in touch with Hannah Taylor. Her email address is :-

henryettataylor@hotmail.com

Thanking you on her behalf.

Diary dates

The BLA will be branching out a bit this year and taking part in 4 events. We are going to hold additional events in Bristol and Carlisle to hopefully reach out to our members in Wales, South West England, Scotland and Northern England. Venues for these events have not yet been booked but we hope to bring you more information on this soon.
BLA event dates and venues (as known at the moment): -

Bristol
Venue TBA
Date Sunday 23rd April 2023

Basingstoke
Kempshott Village Hall
Date Sunday 18th June 2023

Carlisle
Venue TBA
Date TBA (Mid to Late July)

The fourth venue and date are not finalised at the moment due to the loss of our usual midland venue. This will hopefully be a combined event with the BCA, FGUK and the BKA. Details to follow.

10th September 2023
Robin Hood

17th – 19th September
Catfish Study Group

17th September 2023
Kirkcaldy Aquarist Society Auction

24th September 2023
SVAS
Preston and District Aquarist Society Auction
1st October 2023

Anabantoid Association
8th October 2023

NETS Auction (fish and plants only)
14th/15th October

The Xiphophorus Working Group will be holding their meeting next year on the 29th and 30th September and 1st October in Leipzig, Germany. Further details will be announced on the XWG website in due course.