Livebearer News

Official Members Magazine of the BRITISH LIVEBEARER ASSOCIATION



Issue 80

December

2024

Contents:

Page 1: Front cover
Page 2: Contents, Data Protection Act, Committee.
Page 3: Editorial
Page 4: Snippets
Page 6: *Xiphophorus milleri*, a very interesting but little-known platy. By *Christian Raulier*, translated by Dan Fromm.
Page 11: *Nomorhamphus liemi* – the colourful Celebes halfbeak (Vogt, 1978) by *Leo van der Meer*, translated by Dan Fromm with help from Google Translate.
Page 15: The "metallicus" livebearers: a complex view. By *Kees de Jong*, translated by "Google Translate", with a little help from Greg Roebuck.
Page 18: *Scolichthys iota*, Rosen, 1967 by *Fabien Liberge*, translated by Dan Fromm
Page 20: Photos from *Nigel Hunter*Page 22: Wild about platies; by *Derek Lambert*Page 29: Diary dates

Data Protection Act:

In order to comply with the requirements of the Data Protection Act, we must 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.

Committee:

Chairman: Steve Oliver: email: <u>steven.oliver-bla@outlook.com</u> Vice Chairman: Clive Walker: email: <u>clivewalker076@gmail.com</u> Treasurer: Peter Ellis: email: <u>peter_c_ellis@hotmail.com</u> Editor: Greg Roebuck: email <u>girsrr12@gmail.com</u> Events organisers: Paddy Davies; email <u>paddyd@googlemail.com</u> Clive Walker: email: <u>clivewalker076@gmail.com</u> Steven Milne: email: <u>thefinroom@gmail.com</u> Membership Secretary: Peter Ellis: email: <u>peter_c_ellis@hotmail.com</u> Goodeids conservation: Paddy Davies: email <u>paddyd@googlemail.com</u> Xiphophorus conservation: Bill Galbally: <u>fishybilly@outlook.com</u> Fundraising and Sponsership: Sheridan Pamplin: email: <u>sheridan9999@outlook.com</u> Scottish Rep: Steven Milne: email: <u>thefinroom@gmail.com</u> FGUK Liaison: Bill Galbally: <u>fishybilly@outlook.com</u>

Editorial:

It rained. And it rained and rained and rained. Half of the car park turned into a lake and a stream ran past the front door off the Shenstone Community Centre where we held the Autumn Convention. That might explain why the numbers were slightly down on last year but it didn't stop me enjoying the weekend. And yes, I always do enjoy the BLA get-togethers – what's not to like? We meet some good friends and make some new ones. We get to see some nice fish, some fish we've never seen before, get the chance to buy some in the auction and spend a weekend talking fish (among other things).

Seven of us met up on the Friday evening and went for a meal in the pub next door. On the Saturday there was a guppy show, with some stunning examples of the breeder's art, and a wild livebearer show - again with some lovely fish. Dave MacAllister gave a talk on his collecting expeditions to Central America with photos of all the different species of Brachyraphis from Costa Rica and Panama (and one from Mexico). There were also lots of photos of different Xiphophorus species and Dave talked about how to collect them, bring them home and breed them. Dave is a hugely knowledgeable and amusing speaker and he provoked a lot of discussion. There followed a Q & A session with Becky Goodwin, lead aquarist at Chester Zoo Aquarium, Dave MacAllister and Dr Peter Burgess. Again, lots of thought-provoking discussion followed. And then there was a talk from Dr Burgess, who used to lecture at Plymouth University and for many years has written for "Practical Fishkeeping" magazine. Dr Burgess talked about the uses of fish in research. [One snippet that stuck in my mind was his section on "livebearing" sticklebacks. Apparently, a researcher dissected a female stickleback and found her to contain eggs. These eggs proved to be fertile and hatched out in time. Three other females were found to be the same. DNA analysis proved that the young were not just clones of the females; i.e. internal fertilisation must have taken place. Whether the females would eventually have given birth to live young is another question, but maybe the researchers have found the first step on the road to the evolution of livebearing in sticklebacks.] The auction on the Sunday was as successful as usual, with high demand for many of the species on sale. We even managed to fit in the BLA's AGM before it started! I can't speak for everyone who came along but all the people that I spoke to said that it had been a very enjoyable weekend – so why not come along to one of our meetings next year? The details are in the "Diary Dates" section at the end of this newsletter.

My thanks again to Dan Fromm, who found and translated two of the following articles and to Christian Raulier, Jacques Blanc, Fabien Liberge, Leo van der Meer and Kees de Jong for kindly giving their permission to use their material for this newsletter. However, I would love to hear your own thoughts and experiences – any livebearer subject, be it keeping, breeding, collecting or any other aspect of the livebearer hobby. Don't worry about such mundane things as spelling – that is the Editor's job.

And finally, (and once again this feels very strange as I am writing this in mid-November) have a lovely Christmas and a happy and prosperous New Year. See you at a BLA meeting?

Snippets:

I recently had the pleasure of an afternoon in the company of Michael Köck, who started and is the driving force behind the Goodeid Working Group. Michael is currently working in Mexico: he is working with local communities to try to conserve *Goodeids* and other native species in their natural habitats, as well as in captive environments. He has achieved great success in Teuchitlán, (including the re-introduction of formerly extinct-in-the-wild *Skiffia francesae* and *Zoogoneticus tequila*) and other areas. Michael has done this by involving local communities in his work. The problem is that he receives no funding from the Mexican government or from the University in Morelia, where he is based.

He was in Europe to try to raise funds to continue his conservation work [Plan G] and extend it to other areas. Can we help? Does anyone out there know of anybody, corporate or individual, who could donate funds for Michael to continue to conserve this fascinating group of fishes? If you do, then please drop me a line and I will pass it on to Michael.

Another snippet from Michael: Do you keep any *Skiffia* species? He has found that they are especially sensitive to nitrates in the water. Some areas of England which rely on water from aquifers have elevated levels of nitrates in their tap water due to run-off of fertiliser from farm land. If you are having trouble keeping *Skiffia* it might be worth testing your water for nitrates.

And another. The genus *Characodon* has always looked a bit of a mess. Whether fish from a particular location were considered to be *lateralis* or *audax* depended on whether the location was above or below a waterfall. Fish from some locations that therefore were considered to be *audax* looked very similar to *lateralis* to me. And now, Michael told me, the whole genus is under review and there is a strong possibility that all fish from all locations will be considered to be the same species.

From Ronny Vannerom, posted a paragraph on the "Facebook" page of the Goodeid Working Group to the effect that a new law is being brought in, in Flanders, the Flemish-speaking region of Belgium. This law will mean that it will be illegal to keep any animal caught in the wild and this will include fish. However, any animal that the keeper can prove was in his possession before 2025 will be excluded from this new law as will any offspring that these animals have had. This seems to me to be something of a mess, difficult to enforce, and to make matters worse it will not apply to Wallonie, the French-speaking region of Belgium. Even so, Ronny is clearly not happy about such a law being passed in his region.

However, before we get too complacent, there is a rumour that the anti-pet brigade are pushing for a law that would mean that anyone who breeds an animal would have to apply for (and pay for) a licence. This would include anyone who keeps livebearing fish that drop young. Hmmm!

I recently called in at the Wigan branch of a well-known aquarium store chain. The livebearers they have are almost always the cultivated strains of the commonest aquarium fish but I keep calling in anyway. On this occasion there were some livebearers that I didn't recognize in one of the small tanks on the counter. None of the staff knew what they were – apparently a fish-keeper in Southport had given them to the store when he closed down his fish room. So I bought them anyway - £8 for six

fish; one male and five females. Of course it was the male that didn't survive the journey home! I still don't know for sure which species they are so if it was you that gave them to the store can you please let me know what they are so I can try to get a male for them. My best guess is *Xiphophorus pygmaeus*, but if anyone knows better from the rubbish photo below I would love to hear from them at gjrsrr12@gmail.com



Xiphophorus milleri, a very interesting but little-known platy.

By Christian Raulier, Photos by Jacques Blanc & Fabien Liberge Reprinted from Le Vivipare No 120 – February 2014 translated by Dan Fromm



Male Xiphophorus milleri – Fabien Liberge photo

This Central American fish lives principally in shallow streams feeding Lake Catemaco, located in Veracruz, México. It is also found in the mouths of shallow creeks along the shore. It sometimes forms large groups of individuals and prefers to swim in very shallow water, around 10 cm/4 inches. It lives in sympatry (*Editor's note, this is a question of related species that live in the same geographic area without crossing.*) with, among others, *X. helleri*.

I have had this species since 2011, obtained from a long time member of AFV. He had a group of a dozen young whom I put in a 24 liter/6.3 gallon tank with an air driven box filter and a heater, because the ambient temperature was too low for a fish that lives in 23 - 27 °C/73 - 81 °F. They are still in that tank. Seven of my group of juveniles survived to maturity, three females and four males. After keeping them for some months, I was in despair because I'd seen no young because they reach sexual maturity around three months of age and I'd unfortunately already lost three males. One fine day, after I'd had the fish for a year, three neonates disported themselves, at last, in the *Ceratophyllum* (Hornwort) that partially filled the tank. I left the babies with their parents, letting nature take its course, and this worked out well. I don't get broods often. After a first "success" (relatively) of three young, I had to wait several months before the next brood, of four fry. However the females are ofter gravid but few or no newborns appear.



Intensely marked female X. milleri – Fabien Liberge photo



A plainer female, just collected – Jacques Blanc photo

I wonder whether the reason might be their tank's small size, which might facilitate the adults' predation on their young.

My fish aren't always visible. They hide when a shadow approaches the tank's front, unlike their closely related cousin *X. maculatus*, which is much more curious. One must plan on having several hides [translator's note: as used by hunters] because they are so timid that they come out only at feeding time. But when they show themselves, seeing them disport themselves is a pleasure. Unlike the adults, the fry are much braver and don't fear anything that approaches the tank to look in it. Their coloration isn't striking, a mixture of black, brown, and brownish yellow with black spots, but it is, all the same, very pleasing.

Their size is modest, scarcely 2 cm/0.8 inches for males and 4/1.6 for the females, so it is perfectly suited to small tanks but contrary to what I do, it seems to me that 60 liters/15 gallons is the minimum for good maintenance. I haven't tried to keep them with other fish, except in vats, because of the tank's volume and also because I don't like to mix species. But I think that in a good-sized tank, they could easily coexist with a small species of "guppy" of other unaggressive fish.

Last year (2013), for the first time I put a trio of adults and two youngsters out to summer pasture in order to see how they could develop out-of-doors, although the temperature wouldn't be constant, with important daily fluctuations. I put them in a

65 litre/16 gallon vat, with "wild" guppies, a good amount of cerato in the vat and many tiny organisms for food.

Unfortunately, and quickly, I no longer saw any signs of life from the *Xiphophorus*, while the guppies did wonderfully. But perhaps, given their timid nature, they had hidden in the luxuriant vegetations or in the tank's muddy bottom. After a good month outside, I caught them because the temperatures were beginning to drop under 10 °C/60 °F at night. Four of the five individuals were removed from the tank. One female, the largest, who had been very gravid when I put them out, was missing. Unfortunately, no births in the vat but individuals strongly colored with very intense yellow in the fins and the brownish yellow of the body relatively bright. The contrast with the indoors fish was quite surprising. I would certainly try the experiment again but with more constant and especially warmer weather than we had in 2013.

In conclusion, I can say that I especially like this fish, although it is very shy and not very colorful. What I find regrettable in AFV's 2013 annual is that there aren't more hobbyists who have and breed this fish, of which there are two strains certified by AFV, and that only thirty individuals are reported, of which more than one third are with me. I hope that this article will make other members want to try the adventure of keeping this very likeable little *Xiphophorus* and that we'll soon see it population in the hobby grow. I thank Jacques Blanc as well as Alain Grioche for their assistance in putting this article together.

To complete the portrait

AFV's site <u>https://www.francevivipares.fr/</u> has an "Atlas" of livebearers that club members can access. Here's what the *X. milleri* data sheet says:

Xiphophorus milleri Rosen 1960

Size: Males 1.5 & 3 cm depending on the morphotype, females 4.5 cm. **Description:** In spite of its limited distribution, the fish is relatively polymorphic. We are acquainted with three patterns of micromelanophores: with a dot, with a large dot or with stripes. In addition there are two patterns of macromelanophores, which are scattered or in horizontal lines. There are some almost completely black individuals, they are the small morphotype, their females also have several black lines on the rear part of the body.

Maintenance: It is a calm fish that is easily flock bred. The temperature should be around 23 °C/75 °F but they are very tolerant (20 - 27 °C/68 - 82 °F). Plants will shelter newborns, who are rarely more than 20 in a brood. Sexual maturity is reached very rapidly, in three months for small type males. One should take care to isolate females with large type males to avoid losing the character.

Habitat: Found only in Lake Catemaco and streams flowing into it. It is present in the banks' vegetations but proliferates especially in small tributaries where vegetation is more abundant.

[Sub-editor's note: I am not a member of AFV so can't check to see whether this data sheet has been updated since M. Raulier wrote this article.]

References (none cited):

Internet: https://eol.org/pages/46566836

http://www.itis.gov

Le Vivipare n° 2_2004 (not available on line)

Le Vivipare n° 2_2006 (not available on line)

Wishnath, Lothar. 1993. Atlas of Livebearers of the World. TFH. Neptune, NJ. 336 pp.



X. milleri in the wild; note the sediment and algae on the cobble – Jacques Blanc photo



Two views of Lake Catemaco, where *Poecilia catemaconis, Pseudoxiphorus sp., Thorichthys maculipinnis, Paratheraps fenestratus, Astyanax, ...* also occur – note the Water Hyacinth (*Eichornia crassipes*) in the foreground above – Jacques Blanc photos



Nomorhamphus liemi – the colourful Celebes halfbeak (Vogt, 1978)

Leo van der Meer – photos by the author (reprinted from Viviparos 2018-1, translated by Dan Fromm with help from Google Translate)



Male Nomorhamphus liemi

Nomorhampus liemi is a very active schooling fish in the family Zenarchopteridae family, better known as halfbeaks.

This slender, torpedo-shaped, viviparous fish with dorsal and anal fins set far back is native to Asia, more specifically to the island of Sulawesi (formerly Celebes) in Indonesia.

It is a Sulawesi endemic fish found exclusively at an altitude of 1,200 meters in fastflowing mountain streams east of the city of Maros in Central Sulawesi.

Description:

Males of this halfbeak reach a maximum size of seven centimeters, while females can grow to ten to twelve centimeters.

Although the males are much more beautifully colored, you still have to make sure that there are more females in the aquarium. This is because the males will constantly harass the females and there are real quarrellers among them.

Weaker males will certainly not survive in aquariums that are too small in the long term because they will be dominated by the larger and stronger males. In order to keep this species optimally, an aquarium with a length of 120 cm is recommended.

The size of this species alone indicates that we are not dealing with a peaceful community fish. Companions that are too small are mercilessly regarded as food. The fish have a very straight back, with the dorsal fin set far back. The males' tail, dorsal and anal fins are decorated with black spots, the front part of which is coloured red. The full colouring of these fins is fully developed when the fish has reached a length of six to seven centimetres.

The male has a shiny light blue body colour, but this is only clearly visible in an aquarium that is not brightly lit. The females have a more gray-brown body colour. The beak from the eye to the end of the lower jaw is red, with the males showing a much more striking red colour than the females. The lower jaw, especially in the males, continues to grow into a very dark, black fleshy tip. The older they get, the more this fleshy tip takes on a kind of hook shape. Their use and function are still unknown.



Female N. liemi

Care:

At first glance, you would think that these fish are surface dwellers because the beak, which runs below the eyes, is directed upwards. But observations in nature show that these fish are mainly found between the stones on the bottom during the day. During the night they then come up to hunt insects.

To catch these fish in the wild, kerosene lamps are used that shine on the surface of the water. In the dark, the *Nomorhamphus* are almost magically attracted to the artificial light.

In order to imitate nature in the aquarium as best as possible, it is advisable to set it up with stones and plants that do not grow too tall. Low-growing plants (such as *Cryptocoryne*) are definitely recommended, as the *Nomorhamphus* like to seek shelter in them while they look for food.

When food is offered, they will then appear in large numbers to eat the food offered at the water surface. Aquariums that are too small can be the reason why the males damage their long beaks and are constantly involved in fights.

A strong circulation pump must ensure good water circulation and a strong oxygen supply.

Water quality:

Due to their origin (mountain waters up to an altitude of 1200 m) they have a preference for cooler water with a temperature of 20 - 23 °C. In some literature, temperatures of around 25 °C are regularly mentioned. The reason for this is of course the many breeding programs with higher temperatures in the breeding stations. For an aquarium, these fish are really an asset because, unlike many other aquarium fish, they prefer hard water. Tap water usually also has a higher GH value. which means that mixing different types of water (osmosis or rainwater) is not necessary. A hardness of 10 or more degrees is optimal for these fish. The pH value must be between 7 and 8.

In order to provide these fish with the best possible care, a two-week water change is recommended. It is best to change a third of the aquarium contents.

Diet:

These species are mainly carnivorous and like insects that float on the water surface. But they also eat mosquito larvae, cyclops, etc. Breeding fruit flies should therefore be very important. In spring and summer, the diet can be supplemented with aphids from unsprayed flowers or with food from moats (water beetle larvae, etc.). The main aim is to ensure that these fish are not only given dry food, but that they are also offered a good selection of live food, possibly supplemented by frozen food.

Reproduction:

Nomorhamphus are live-bearing fish. In the aquarium they are very lively animals, with the males almost always staying behind a female. Such constant observation always results in an unnoticed approach in order to mate.

The andropodium, the male's reproductive organ, looks almost like a normal fin. In fact, however, only the rear section of the anal fin is normally shaped. In the front lower part of the anal fin, the first rays run parallel to the body. The genital papilla with the round sperm opening is in front of it.

The female has two ovaries. Each can contain around eight embryos. A maximum of 16 young can be born, but usually fewer.

Pregnant females have a clearly spherical belly and a silvery belly. Before giving birth, they retreat deep into the plants. With water parameters of 8 °dGH and pH 7.5, a pregnancy lasts around six weeks. The size of the young fish depends mainly on the number of fish in the ovaries.

Final remarks:

This unusual live-bearing species is definitely recommended for lovers of live-bearing fish.

As the largest freshwater halfbeak, this species should definitely be kept in a school. A large aquarium is therefore certainly necessary in order to be able to enjoy these fish optimally.

Even though they have the reputation of being very expensive and difficult fish, you should still take the risk of buying some and enjoy these rare Asian beauties.



A young pair of N. liemi

The "metallicus" livebearers: a complex view

By *Kees de Jong* Translated by "Google Translate" with a little help from Greg Roebuck

The fish commonly known as the "Black-chinned livebearer" (*Girardinus metallicus*) remains a fascinating tooth-carp for me. Thanks to Nico Timmermans I have had a large group of these fish in an aquarium for over a year now. It is known that there are different types of males of this species. For example, there are males with a black belly, males with a golden underside and males which lack this pattern. In my group I have all three types of males, with my golden belly males also having the black pattern. I enjoy watching the always-active males, with the differences in courtship between the different males is quickly noticeable. This difference has been known and researched since the first import of the different males. In an earlier article I gave a summary of this (de jong. 2021). If you are looking at a large group of constantly moving fish in an aquarium, it is difficult to determine small differences in behaviour. They are swarming around each other too much for that.



Different types of male *metallicus*. Upper left: a male with a golden belly and black markings; upper right: a black belly male; lower left: a black belly male with a black head; lower right: a male without markings. The golden male with the black belly displays in the same way as the black belly males.



A female of the metallic toothcarp, or black-chinned livebearer, (*Girardinus* metallicus)

Bertram, et al. (2016) elaborate on different behaviours between males with black markings. They investigated the difference between the number of matings and the risk-averse behaviour between dominant and non-dominant males. They found that there were differences between individual males that could not always be linked to a type. The males behaved as independent individuals. All of these results were obtained with experiments in which one male was studied each time. Bertram et al. indicate that this means that the important aspect of social interaction has not been taken into account.

The article by Kolluru et al (2024) is about research on females and caught my attention. The question that the researchers ask is whether the females of *Girardinus metallicus*, like the males, show aggressive behaviour and which signals they use. They indicate that, unlike many other studies, they do not focus on the partner choice of the females but want to look at the individual behaviour of the females and differences between the behaviour of males and females. The article provides a lot of information and indications for behaviour. I will only present the most important findings of the study here.

Females display aggressive behaviour in various situations including competition for food and mates. The behaviour that they display is the same as that of males and consists of chasing, biting and spreading their fins. The dark spot is especially important in choosing a partner and fin spreading is most often used in competition for food. In general, larger females are more aggressive, which is especially visible in the competition for food.

The dark dorsal spot is an expression of aggression. When females start to display aggressive behaviour, the spot is darker. The spot could also play a role in attracting or repelling partners, but more research is needed to determine this. Spreading their fins is used by female among themselves as a signal of aggression during food competition. This does not happen towards males. Males spread their fins for longer than females, who only do this for a short time.

Contrary to expectations, males do not prefer the larger females. This may be due to the fact that larger females are more aggressive. It has not been determined to what extent female aggression impacts partner choice. The study showed that aggressive females have fewer offspring than less aggressive ones. This is striking because one would expect that more aggressive females are better able to compete for partners and resources, which would lead to higher reproductive success. Kolluru et al. provide a number of possible explanations for this:

- The energy that females invest in aggressive behaviour may come at the expense of investment in their offspring;
- Males do not prefer aggressive females, they show less mating behaviour towards larger females that are more aggressive, and
- Other factors. There are a large number of factors that determine reproductive success and partly due to the interplay of these factors, determining the influence is very complex. Think of things like genetics, environment, availability of food and disease pressure.

Further research is needed here. The article makes a number of suggestions for additional research.

The research has shown that the females of the *metallicus* livebearer have different signals to show aggressive behaviour. This is something that has also been shown in males. It is also becoming increasingly clear that fish also make individual choices and show individual behaviour. This cannot always be determined on the basis of a characteristic or situation. In my opinion, these studies do provide information about the behaviour of the fish, but in the chosen experimental setting the social context is lost. Of course, it is better to collect pure data. But when I look at the exuberant interaction in my school of *metallicus* tooth-carps, much more happens there than between two fish. In nature, of course, many more factors, such as predators, are important.

But, well, through all this research we do learn more about our fish. I notice that I myself also look more attentively at the swarming behaviour in my group.

Literature cited:

Bertram, S. M., C. Healy, J. Hogge, Z. Kritikos, J. Pipitone, & G. R. Kolluru (2016). Positive relationship between risk-taking behaviour and aggression in subordinate but not dominant males of a Cuban poeciliid fish. Behaviour 153(12): 1489-1507. https://www.jstor.org/stable/43956346

De Jong, K. (2021). De balts van het metaaltandkarpertje. Poecilia Nieuws (2): 3-

Kolluru, G. R., Y. J. Akky, A. Weissman, H. Poore, D. Weiner, & R. L. Earley (2024). Cross-context behavioural correlations and signals of aggression in females of a livebearing fish. Biological Journal of the Linnean Society. (XX): 1-17. https://doi.org/10.1093/biolinnean/blae006

Scolichthys iota, Rosen, 1967

Text and Photos: Fabien Liberge (Originally published in Le Vivipare 135, August 2018; Translated by Dan Fromm)



A pair of adult Scolichthys iota

AFV's online Atlas of Livebearers [available only to members] indicates that the genus *Scolichthys* comprises only two species, *S. greenwayi* and *S. iota*. It also states that these two are rather easily maintained and without particular requirements ..., even going so far as to assert that they would be interesting species for aquarists beginning to breed their fish.

I 'd never had either of these species but I remember that my friend Emmanuel Gaignard had kept *S. greenwayi* for some time. Emmanual isn't a beginner, he's even a confirmed breeder who's had much success rearing many species and genera and I remember that in fact he had numerous young *S. greenwayi*. It seems to me that he had acquired this species during a trip in Germany to DGLZ's annual general meeting. This meeting is great because it is still one of the only places where this sort of rare fish can be found. So, during my visit there in 2014, when I heard that *Scolichthys iota* was offered for sale I didn't hesitate to acquire this fish which I hadn't seen until then.

It goes without saying that it isn't the most colourful poeciliid but for me it has the little grey fishes' charm and especially ... livebearers'.

Personal experience:

I acquired two pairs in September 2015. My initial goal was to photograph them so I put them in an unpretentious small tank furnished only with a floating *Anubias*. The fish were young and in good health but I knew nothing about their requirements. I left them at room temperature, which was, according to the Atlas, perhaps a little cool.

However, I soon saw a few young fish in the tank. I'd added a little Java Moss and then I let things happen at their own pace. I gave them finely ground enriched dry food (recommended by the purchasing group) as well as artemia nauplii. My group expanded rapidly (I suppose that this fish has a form of superfetation or has very small broods) and I was able to present a few fish at Pont l'Evéque [AFV meeting] the next season.



A male *S. iota*

To my great surprise I received several requests for this discreetly charming little fish. I then thought that I should increase "production" and I transferred the group from the little ten litre tank they were still in to put them in a forty five litre aquarium where, I supposed, the number of fry was going to explode.



And a female

Unfortunately the opposite occurred. The fish no longer seemed at ease. They seemed fearful and began to die one after another. I no longer saw babies appear.

I finally repatriated the few remaining adults to their original 10L tank but nothing worked. I lost my last adult female that year. I wasn't able to collect any newborns even by isolating her in a floating cage.

Extract from the Atlas - Scolichthys iota Rosen 1967

Size: males, 2 cm, females 3.5 cm

Characterization: the body is elongated, colored grey. Males have four to eleven short vertical dark bars along the flanks. These bars aren't very visible in females. The dorsal and caudal have a dark band. A black spot can be seen at the pectorals' bases.

Maintenance: See the entry for *S. greenwayi*, with temperature between 25 and 28 °C.

Habitat: These fish are originally from the Río Chajmaic, the headwater source of the Río de la Pasión, Alta Verapaz, Guatemala. They are especially found in small brooks flowing into this river. These fast-flowing brooks have areas rich in vegetation. The temperature varies between 24 and 26 °C.

Photos from Nigel Hunter: (Originally posted on "Facebook")

4 different male *X. helleri* that looked good tonight:



Albino red marble with king gene



Rio Atoyac gold/yellow



San Juan Guichicovi showing nice blue



Rio Basura with a good length tail

Wild about platies

Text and photographs by Derek Lambert

Before she died, Pat Lambert very kindly gave me permission to use any of her son Derek's articles that appeared in the now-defunct "Aquarist and Pondkeeper" magazine. In 1995 Derek had three articles published about the wild-type platies of Mexico. Below is the first of those articles. I shall raise a glass and give silent thanks to both Derek and Pat.

Part One - Top choices:

In this three-part review, I intend to cover in depth the wild Platy species as we know them today. I am aware that at least one, if not more, new species are in the pipeline and, if the scientific papers of these are published before the final part has gone to press, I will include the new species at the end of the series.

In planning this review, I had quite a few problems deciding how to group the nine platy species into three roughly equal-sized articles. The obvious way would have been to put them in alphabetical order, but this would separate some very closely related species which, really, should be dealt with together.

Another, more scientific, way would have been to group the species according to their relationship to each other. This worked perfectly with the Rio Panuco Basin swordtail series I did a little while ago because there are three clades (species groups) of three species each. Unfortunately, the platies do not constitute such a neat package. This is because only the Northern Platies have been placed in a separate species group, and this probably contains four species, not three.

In the end, I have grouped those species which I feel fit together from a hobbyist's point of view. This is not very scientific, I know, but at the end of the day, these articles are written for aquarists.

1. Pueblo Platy

Scientific name: *Xiphophorus evelynae*, Rosen 1960. Synonym: *Xiphophorus variatus evelynae*, Rosen 1960.

The Pueblo platy was scientifically named in honour of Mrs Evelyn Gordon who, in 1939, was instrumental in collecting the first known specimens. It was first described by Donn E. Rosen (1960) in "Middle-American poeciliid fishes of the genus *Xiphophorus*", *Bull. Florida State Mus., biol., sci.,* vol. 5, no.4, pp. 57-242.

The type locality (i.e. – where the fish was first found) was the Rio Xanthophyll, where it meets the Rio Necaxa at Tepexic, and the type series (number of specimens collected at one time) was provided by M. and E. Gordon on 6 April 1939. The holotype (specimen on which the scientific description is based) is a male 33mm (1.3 inches) S.L. (standard length, I.e. snout to base of caudal fin) and the allotype (specimen of the opposite sex to the holotype but described at the same time) is an adult female measuring 36.3mm (1.43 inches) S.L.

The Pueblo Platy is concentrated above a series of cataracts near the village of Necaxa, which is also known as La Mesa and is approximately 1,220m (4000 ft) above sea level. At one time, the waters of the Rio Necaxa cascaded down into a gorge some 336m (1,100ft) below the plateau, but this area has since been dammed and a reservoir created which feeds a hydroelectric plant.

In 1939, this species was collected in the pools and river below the falls, and it was here that the largest and most strongly marked fish were found. In some males, the dorsal fin was so extended that it reached back almost to the caudal peduncle. However, a severe hurricane in 1940 flooded the area, creating currents which very few fish would have been able to survive. When this area was collected again in 1957 no specimens could be found, despite other species of livebearers having reestablished themselves. It is possible that the water being diverted through the hydroelectric plant would make re-stocking from above impossible. So far, this platy has only been found in the Rio Tecolutla system in Pueblo, Mexico.

The maximum adult size is about 4cm (ca 1.6in) for males and 5cm (ca 2in) for females. The body form is somewhat similar to the better known Variable, Sunset or Variatus Platy (see below) to which it is closely related.

The female is rather drab in colour, being brownish across the back, with a whitish stomach area. Sometimes, she will have fine black spots across the back and rear of the body. The underlying coloration of the male is similar. However, it is overlaid with a purple sheen and lots of fine spots, particularly concentrated towards the rear of the fish.

From just behind the pectoral fin to behind the dorsal fin, there is a region of vertical black bars which appear on the dominant males of the colony when they are courting. The males' caudal and dorsal fins are yellow to bright orange, while the females' are pale yellow to clear.

Aquarium care

Altogether, this is an attractive species which deserves more attention in the hobby than it currently receives. It is a peaceful, adaptable fish which does well in the aquarium and will "colony breed" without too much difficulty, once the adults are used to being with small fry. However, big old females will sometimes turn cannibalistic and attack new-born babies. Large males will often spar in the centre of the tank, at which time the colours can be nothing short of breathtaking.

Broods are born on a four-weekly cycle and can number up to 50 robust fry. The new-born babies will hide in the plants at the bottom of the tank for the first few days, after which they venture out in search of food.

The Pueblo Platy was first imported into the UK by Howard Preston in April 1979; he had met Dr Radda in Puebla, Mexico, and was given some of his wild-caught specimens. No information was given about the collection point at that time.



A beautifully speckled Pueblo Platy.

2. Variable Platy

Scientific name: *Xiphophorus variatus* (Meek, 1904). Synonym: *Platypoecilus variatus* (Meek, 1904).

The scientific and common names of this platy refer to the variable coloration of the species found in nature. It was first described by Meek, S.E. (1904) in "The fresh

water fishes of Mexico north of the Isthmus of Tehuantepic", *Field Columbian Mus. Publ. Ser.*, vol. 5; pp1–252.

The type locality for the Variable Platy was at Cuidad Valles in the state of San Luis Potosi, Mexico, but the species can also be found on the Atlantic slope of eastern Mexico from the Rio Soto la Marina system in Tamaulipas State, to the Rio Nautla system in Vera Cruz state.

This species is generally found in spring pools, ditches and swamps, occasionally in sluggish and rapid flowing streams. In these habitats, there is usually dense aquatic plant growth and many emergents near the banks. The substrate is usually mud and clay.

Males can achieve 4.5cm (1.8in) and females 5.5cm (2.2in) in captivity, but in the wild, they are usually much smaller. As its name would suggest, this is a very variable species, with lots of different colour forms throughout its range.

The body shape is much more slender than that of the Southern Platy (*Xiphophorus maculates*), and the dorsalfin has a broader base, with, generally, more rays in it and a straighter edge, making the fin look more like a parallelogram in shape. Almost every population is different in colour, and great variation occurs within a population.

The Variable Platy has been a staple in the aquatic hobby since it was first introduced to German aquaria in 1931. These first specimens were young fish collected by Conrad from a cattle hole near the city of Tampico.

Aquarium care

This is an easily maintained and bred species, which will tolerate poor conditions and is peaceful with other fish. In fact, it admirably fulfils all the criteria which make a fish suitable for community aquarium life. However, to be seen at its best, the Variable Platy needs good tank conditions and plenty of good food. It will tolerate a wide range of temperatures, often being collected in small pools, where daytime water temperatures may soar to above 30°C (86°F) while night-time temperatures may drop as low as 20°C (68°F).

Broods are born on a monthly basis and may number up to 100. These grow fairly slowly and it may be eighteen months to two years before the males exhibit their full adult coloration, although they are often sexually mature long before this.



The Variable Platy – as its name suggests – is found in several forms in the wild.

3. Spiketail Platy

Scientific name: Xiphophorum xiphidium, Gordon 1932. Synonyms: Platypoecilus maculatus, Regan 1913. Platypoecilus xiphidium, Gordon, 1932 Xiphophorus variatus xiphidium, Rosen, 1960

The scientific name *xiphidium*, means "sword-bearing" and refers to the small spike which mature males of this species exhibit. The Spiketail Platy was first described by Myron Gordon (1932) in "Dr Myron Gordon going on expedition." *Aquatic Life*, **vol.15:** pp287 – 288.

Although this species was well known for many years, no holotype was ever designated. The name, therefore, rests on a syntypic series (a number of specimens used to designate a species when no holotype has been selected) collected by Gordon, Creaser and Ostos on 25 April 1930 from the Rio Corona (Rio Santa Engracia) at La Corona, 15km (9.3 miles) north of Cuidad Victoriam Rio Soto La Marina system, in the state of Tamaulipas, Mexico.

In 1960, Rosen designated a lectotype (a specimen selected from syntypes to act as the "official" type for a species) from this series, which is a 20mm (1.14in) [sic] S.L. adult male. The species is found throughout the Rio Sota la Marina systemand in ponds and irrigation ditches close to this river system.

In captivity, male Spiketail Platies will achieve a size of 3cm (1.2in) and females 4cm (1.6in). It is a deep-bodied species with a high back and short, stubby body. The basic body coloration is greenish-brown on the top, becoming white on the belly. The fins are pale yellow to clear, with a dusky crescent in the dorsal fin of both sexes.

The caudal peduncle has one of several tail spot patterns: "One Spot", "Two Spot" and "Crescent" are known, but others may occur. These have often been associated with certain populations but, in fact, all tail spot patterns can be caught in the same net in the wild.

As the fish become sexually mature, the males will start to develop their full coloration. This seems to be quite variable, and well-coloured specimens will have their basic colour overlaid with purple and a number of vertical black bars along the upper flanks ("Parr Markings"). Sometimes, black spots will also develop and may become so profuse that the whole of the middle region of the fish will be purple with a black saddle.

The caudal fin of the male has a short "sword", but this fish is unequivocably a Platy from a scientific point of view.

Aquarium care

All in all, this is a very attractive fish which deserves a place in the mainstream hobby, as opposed to just being maintained by specialist livebearer enthusiasts.

The Spiketail Platy is not as easy to maintain in the aquarium as the cultivated varieties are, but it is still a relatively hardy fish. It does best in a well-planted aquarium with regular partial water changes and a diet which includes some live food. The temperature should be approximately 23°C (ca 73.5°F).

Broods are born on a monthly cycle and have been known to number up to 84; however, 20 is a more usual number for a young female, and about 35 for a fully adult fish.

This is a relatively short-lived species, so broods need to be saved from young females if the species is to be maintained in the long term. Provided it is well fed and plenty of low cover is provided, the Spiketail Platy will "flock breed", i.e. will breed in groups.



This Two-spot Spiketail Platy male comes from the Rio Purificatión.



Common name

Ander's Platy Monterrey Platy Pueblo Platy Quatro Cienegas Platy Southern Platy Muzquiz Platy Catemaco Platy Variable Platy Spiketail Platy

Platy species Scientific Name

Xiphophorus andersi Meyer & Schartl, 1980 Xiphophorus couchianus Girard, 1859 Xiphophorus evelynae Rosen, 1960 Xiphophorus gordoni Miller & Minckley, 1963 Xiphophorus maculatus Gunther, 1866 Xiphophorus meyeri Schartl & Shroeder, 1988 Xiphophorus milleri Rosen, 1960 Xiphophorus variatus Meek, 1904 Xiphophorus xiphidium Gordon, 1932

Diary Dates

Spring Show: Bristol, April 13th Hengrove Community Centre, Farfield Road, Bristol, BS14 9NX

Summer Shows:

1. Hampshire: Basingstoke, June 1st Village Hall, Pack Lane, Basingstoke, RG22 5HN

2. Cumbria: Carlisle, July 6th Harraby Catholic Club, Edgehill Road, Carlisle, CA1 3PQ

Autumn Convention: Midlands, September 20th / 21st Shenstone Village Hall, Barnes Lane, Shenstone (near Lichfield), WS14 0LT