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Data Protection Act

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Editorial

As you might remember, we lost Eddie Wade, long-time BLA member and expert fishkeeper and breeder, in March of this year. It was a shock to us and even more so to his family. Steve Oliver, our chairman, and two more BLA committee members went over to the Isle of Wight to collect Eddie's fish and bring them back to be sold in the Bristol auction on 13th April. Thanks to them, the BLA raised over £700 for Eddie's family. However, some of Eddie's tanks were not labeled and we still do not know for certain which species or ESU they contained. Some of these were *Characodon* species, which makes it even more important to identify them correctly as they are so badly threatened or even extinct in the wild.

This got me thinking; I know which species are present in all of my tanks but not all of them are labelled with the species of fish that they contain. Would someone be able to identify the species they contain? Could the fish be sold if it were not absolutely certain which species they are? My next job is to label every single tank properly. Not that I think that I am in any danger, but I just don't want the fish that I have looked after and bred to be allowed to just die because no-one knew for sure what they were. What about you?

I would like to take this opportunity to thank Kees de Jong for sending me yet another article and Ulrike Korte for sending (via Steve Oliver) the article and photographs on *Dermogenys* halfbeaks. I have never kept halfbeaks and don't know a great deal about them and, in addition, I have included very little information about them in all of the newsletters since I have been editor so this article was most useful. And also, many thanks to Dan Fromm for his prompting and sub-editing and making this newsletter look much more professional. Thanks Dan.

Report on the BLA meeting, Bristol, 13th April 2025

I always enjoy our BLA get-togethers, and this was no exception, even with the sad loss of Eddie Wade in the background. For me, the three-and-a-half hour drive to Bristol was worth it; to see old friends, talk to new ones, talk about fish, see species I've never seen before and, of course, the auction.

The formal part of the day started with a Q & A session. Our experts were Shaun Stevens, of Tropiquaria in Somerset, plus founding members of the BLA Dave Macallister and Nigel Hunter. Dave and Nigel have been on many collecting expeditions to Mexico and other Central American countries and have bred countless species of fish (and not just livebearers) between them. Shaun looks after the biggest collection of freshwater fish in the UK which contains over thirty ESUs of Goodeids. (In fact, the biggest collection of Goodeids outside of Mexico.) The discussion started off with the best way of bagging fish and moved on to the effects of water hardness, where to secure live foods and how to get the best out of *Characodon* species.

And then there was the auction. The top price paid (£50) was for a bag of Merry Widows – *Phallichthys amates amates*. I was very pleased to see them as I had not seen any for decades and didn't know if there were any left in the UK. [*I really hope that whoever bought them gets them breeding and brings some of the offspring along to future BLA events*.] A pair of *Quintana atrizona* (a species that I don't think I had ever seen before) went for £45. Other interesting species that came up in the auction included *Poecilia chica* and *P. wingei, Neoheterandria elegans, Girardinus metallicus, Limia perugiae, Xiphophorus xiphidium, X. cortezi, X. alvarezi, X. signum, X. montezumae, X. variatus* "La Laguna", *X. milleri, X. pygmaeus, X. kallmani, X. nezahualcoyotl, Scolichthys iota, Phallichthys tico, Priapichthys annectens, Phalloceros caudomaculatus, Heterandria formosa, Characodon lateralis "Los Beros", C. audax* "Abraham Gonzales", *C. audax* "Ojo Garabato" and *C. audax* "Guadaloupe Aguilera", *Zoogoneticus tequila, Skiffia multipunctata, S. francesae* and *S. sp* "V188 Sayula", *Xenotoca variata, Neotoca bilinieata* and *Crenichthys baileyi baileyi.* [Forgive me if I have forgotten any species that particularly interested you!]

The sad part of the auction was selling off Eddie's fish. He was a keen and serious, as well as a gifted, fish-keeper and breeder and so there was a lot of his fish to sell. These included some rare and interesting species. Eddie's fish sold for a little over £700, which went to Eddie's family. BLA member Laura Kelly made a very generous donation on top of this and I am sure that Eddie's family would want to pass on their thanks to her.

At the end of the auction the BLA was able to make a donation of $\pounds 180$ to Tropiquaria to support the work done there on the conservation of Goodeids.

Snippets

During the Q & A session at the Bristol meeting the conversation turned to the Characodons.

Our experts' tips for success with this group of fishes:

- 1. Don't crowd them give them a spacious aquarium with not too many fish in it.
- 2. Keep them cool.
- 3. Make sure that the water quality is high. Nigel's friend in Holland does partial water changes most days.

The discussion also turned to live food. All three of our experts feed lots of daphnia. Two of them know of ponds which have daphnia and can harvest their own supply. The danger of introducing hydra into your tanks was mentioned but so was the treatment which will kill them – flubendazole. This is present in several commercial worm and fluke treatments but is also present in dog-worming tablets – if you can work out the correct dose. [*I am not sure that I would dare risk adding too much and killing all the fish in a tank - Editor.*]

Personally, I would add a fourth tip to the list: separate out a gravid female into her own tank which has both floating plants (*Nitella* seems to work well) and rounded stones on the bottom so that fry can slip into the spaces between the stones where the adult can't see or reach them.

A new species in the genus *Phalloceros: P. circummontanus*

By Kees de Jong

Phalloceros caudimaculatus (Hensel 1858) was the first live-bearing toothcarp kept and bred in the hobby. Around 1900 it was a real sensation that one could keep a live-bearing fish in the aquarium.



Phalloceros caudimaculatus (Drawing Ruud Wildekamp)

Hensel had described the species as *Girardinus caudimaculatus*. Eigenmann found the differences with the other species in the genus so great that he described the genus *Phalloceros* in 1907 and placed the species in it. The genus remained monotypic for a long time, but this changed in 2008 when Lucinda described 21 new species in the genus. Since then a number of changes have taken place in the genus. Two species (*P. aspilos* and *P. tupinamba*) are considered synonymous with *Phalloceros leptokeras* Lucinda 2008 (Souto-Santos et al. 2019). Souto-Santos, Lucinda & Buckup 2023 added a twenty-first species to the genus with *Phalloceros maldonadoi*.

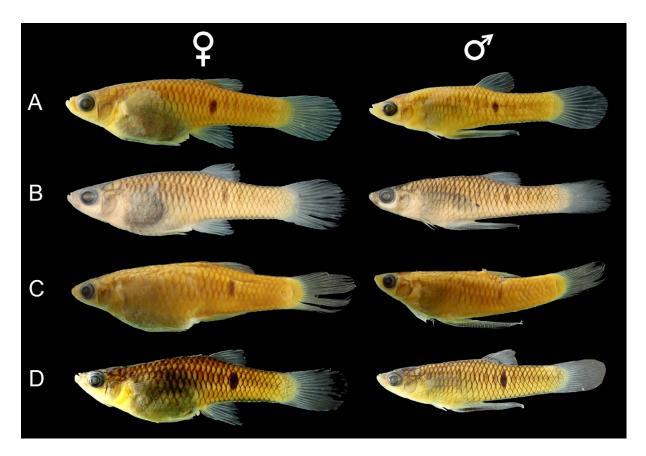
These species occur in coastal waters from the southern part of the Brazilian state of Bahia to Uruguay, extending west to the La Plata watercourse in Argentina and Paraguay, reaching Tocantins-Araguaia.

Like other poeciliid fishes, species of *Phalloceros* exhibit pronounced sexual dimorphism. Adult males possess elongated third, fourth and fifth anal fin rays that form a copulatory organ called the gonopodium, while adult females have a prominent genital papilla located posterior to the anus.

Souto-Santos, Mejia, Arcila & Buckup 2023 analysed the *Phalloceros harpagos* species complex. By describing a new species of *Phalloceros* from the Brazilian highlands, based on morphological and molecular evidence, they provided further insight into this complex. The new species occurs in the upper Rio Paraná, the upper Rio Paraiba do Sul and the upper reaches of coastal rivers in south-eastern Brazil.

The new species is distinguished from other species within the genus *Phalloceros* by features of the male and female genitalia, the number of fin rays in the dorsal fin, the shape of the dorsal profile, the pigmentation and the position of the vertically elongated dark spot on the flanks. Analysis of the mitocondrial CO1 gene revealed a genetic divergence of 6% between the new species and *P. harpagos*, which supports the choice to separate this taxon at species level. It is therefore a cryptic species that has not been distinguished separately for a long time. The females of this species grow to 3cm long. The males remain smaller.

Genetic analysis shows that the hábitat of *P. harpagos* is restricted to the right bank drainage areas of the middle Paraibo do Sul and the coastal drainage areas in the Rio de Janeiro metropolitana area.

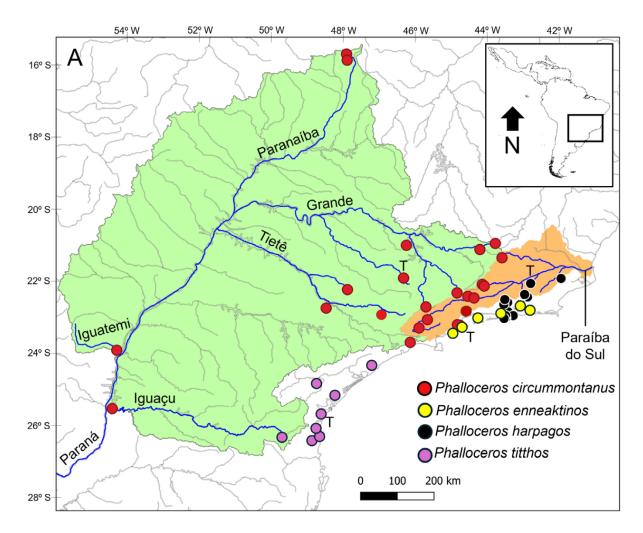


A number of species from the genus *Phalloceros*. A. *P. circummontanus* \bigcirc 25.7 mm \circlearrowright 17.5 mm. B. *P. enneaktinos* \bigcirc 24.9 mm SL, \circlearrowright 22.9 mm. C. *P. harpagos* \bigcirc 31.4 mm SL, \circlearrowright 25.1 mm. D. *P. titthos* \bigcirc 24.3 mm SL, \circlearrowright 18.1 mm (illustration from SOUTO-SANTOS ET AL 2025).

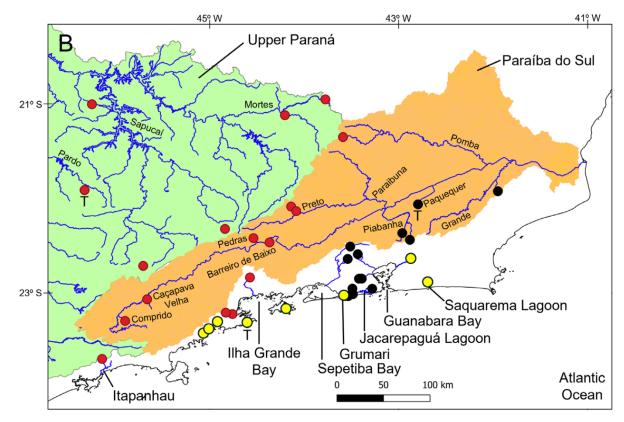
The name given to the new species by Souto-Santos et al. is *Phalloceros circummontanus*. The species name is derived from a combination of two Latin words: circum – round or around, and montanus – mountains.

The name refers to the distribution of the species around the Serra da Mantiqueira and Serra do Mar mountain ranges as well as the associated highlands that dominate south-eastern Brazil.

With the description of *P. circummontanus* the genus *Phalloceros* includes 22 species. Many of these species are difficult or impossible to tell apart. It is not possible to distinguish between the different species without a microscope. The spots on the body do not offer sufficient possibilities for this. The exact location where the fish were caught is necessary to determine the species name with the help of the description. Since it is no longer possible for enthusiasts to collect fish in Brazil, the chance that the species will turn up in the hobby is very small. It is therefore important to be careful with the species from this group that we still have in our aquaria.



Known geographic distribution of *Phalloceros circummontanus*, including updated distribution of *P. enneaktinos*, *P. harpagos*, and *P. titthos*. -- Global view of the study area. T = Type-locality



Known geographic distribution of *Phalloceros circummontanus*, including updated distribution of *P. enneaktinos*, *P. harpagos*, and *P. titthos*. -- Close-up of the watershed between the upper Paraná and Paraíba do Sul.

Literature cited:

Souto-Santos, Igor C. A., Eduardo Mejia, Dahiana Arcila & Paulo A. Buckup. 2025. Dismantling the *Phalloceros harpagos* species complex (Teleostei: Poeciliidae): description of a new species from Brazilian highlands based on morphological and molecular evidence. Neotrop. Ichthyol. 23 (1): 1-20 <u>https://doi.org/10.1590/1982-0224-2024-0129</u>

Lucinda, P. H. F. 2008. Systematics and biogeography of the genus *Phalloceros* Eigenmann, 1907 (Cyprinodontiformes: Poeciliidae: Poeciliinae), with the description of twenty-one new species. Neotropical Ichthyology. (6): 113-158. https://www.biodiversitylibrary.org/part/109455

Subeditor's comment: This paper leaves most populations of nominal *P. harpagos*, which is widely distributed, in nomenclatural limbo.

Wild about platies – Part Three – The Northern Connection

By Derek Lambert

Before she died, Derek's mum, Pat Lambert, very kindly gave me permission to use any of Derek's articles which had appeared in "Aquarist and Pondkeeper" (which became "Today's Fishkeeper"). The article below was the third part of a series and originally appeared in the May 1995 issue of "Aquarist and Pondkeeper". All photos are Derek's.



The Rio Santa Catarina – ex-biotope of the Monterrey Platy.

The final group of platies to be dealt with are the three Northern Platies. These three species represent remnant populations of a Platy which was widespread in the northern part of Mexico when the climate was warmer and wetter than today.

The climate changed and many of the rivers dried up. It became so cold during the winter, that many of the native species died out and this ancestral Northern Platy species was reduced to a few warm-water springs, where both the temperature and water flow were maintained all year round.

Isolated populations of fish soon start to evolve slight differences and, over thousands of years, become separate species in their own right. Today we recognise three species of Northern Platy, with a fourth possibly in the pipeline.

All three species are from very limited habitats which have been reduced in recent times. They are currently listed as "Endangered" in the *Red Data Book* and, therefore, stocks need to be maintained in captivity.

Monterrey Platy

Scientific name: Xiphophorus couchianus (Girard 1859).

Synonyms: *Limia couchiana* Girard 1859, *Poecilia couchii* Günther 1866 This species was first described by C. Girard (1859) in "Ichthyological notices, 41 – 59." *Proc. Acad. Nat. Sci. Philadelphia*, **No 11:** pp113 – 122. It was named for Lieutenant D. N. Couch, who Girard described as "a lover and cultivator of natural sciences" in April 1859. The type locality (see Part 1 – originally published in the February 1995 "Aquarist and Pondkeeper" and reproduced in Livebearer News 80, Decmber 2024 for definition of this

and other technical terms) is the Rio San Juán at Cadarecta and Monterrey, in the state of Nuevo León, Mexico. The holotype is a female 4.1cm (1.6in) long. In captivity males achieve a size of 2.5cm (1 in) while females reach 4cm (ca 1.6in).

The range of the Monterrey Platy included several habitats in and around the city of Monterrey, particularly in the headwater streams (but see below), but it is now in severe danger of becoming extinct due to pollution, habitat destruction and hybridisation with introduced *Xiphophorus*. A few pure populations can still be found in the wild, [N.B. *Written in 1995*] but whether or not they will survive in the long term is doubtful.

In nature, this species is usually found in spring pools and, rarely, in sluggish flowing streams and ditches. The substrate is most often mud and clay, but rarely rocky. There is dense, submerged, aquatic plant growth and some emergent plants towards the banks.

The Monterrey Platy is a short stubby fish which has rather drab coloration. The upper part of the body is dark brown, while the lower half is off-white. The dorsal and anal fins have several dark crescents in them; otherwise all the fins are colourless.

Rosen 1960 details a variable number of deep-lying black spots on the caudal peduncle. These were not present on all individuals but were present in all populations of this species known at that time. This black spotting seems to have been lost in the generations that have been bred in captivity.

A population of *Xiphophorus couchianus* found around Apodaca is under investigation at this time. Its coloration is similar to the Monterrey Platy. [*i.e. in 1995*] but the background tends to be darker, with a few black speckles along the ventral surface of the body. This population may turn out to be a separate species. [*Editor – This population became known as X. cf. couchianus*]. However, in all aspects of its aquarium care and reproduction, it is similar to the Monterrey Platy.

Aquarium care

The Monterrey Platy is a rather temperamental fish which requires careful maintenance if it is to do well in the aquarium. It is a rather shy and retiring species which likes plenty of plant cover and hiding places. A wide range of water conditions seem to be tolerated, providing the change-over is slow. A sudden change in pH will kill this delicate fish, though. Ideally, the temperature should be maintained at approximately $24^{\circ}C$ (75°F).

It is unlikely that this species could survive such low temperatures in the wild if it were not for the warmer spring waters which feed their habitats. In those places where the springs have stopped flowing, during even part of the year, the Monterrey Platy has died out. This is a short-lived species, living only 12 months on average. Old females often produce weak fry which have a high mortality rate. Brood sizes can be as large as 40, but 20 is average for a young adult female.



A young Monterrey Platy male.

Cuatro Ciénegas Platy

Scientific name: Xiphophorus gordoni Miller & Minckley, 1963.

Synonyms: None

The Cuatro Ciénegas Platy was first described by Robert Rush Miller and W.L. Minckley (1963) in "*Xiphophorus gordoni*, a New species of Platyfish from Coahuila, Mexico." *Copeia*, **No 3:** pp. 538 – 546. This species was named for Dr Myron Gordon who did so much work on this genus and greatly extended our understanding of Platies and Swords.

The type locality is Laguna Santa Tecla, 20 miles by air, south-southeast of the town of Cuatro Ciénegas, in the state of Coahuila, Mexico. The types were collected by R.R. Miller, C. L.Hubbs, W.L.Minckley, D. R. Tindall and José Lugo Jr. On 9 April 1961. The holotype is a 24mm (ca 0.9in) S.L. (standard length) male and the allotype is a 24.6mm (ca 1in) female. In captivity, males reach 3cm (1.2in) and females 4cm (ca 1.6in).

This species is limited to spring-fed pools and streams heated by volcanic activity in the area around Santa Tecla in the Cuatro Ciénegas Basin. Specimens are most commonly found in a spring-fed ditch entering the laguna and in vegetation-choked, silt-bottomed, marshy areas adjacent to the outlet of the laguna. It could also (possibly) be in the original stream, which has been modified into a canal called La Pololla. The original stream drained the eastern side of the basin.

In common with the other Northern Platies, the Cuatro Ciénegas Platy has a strongly bicoloured body, being brown on the back and off-white on the belly. The two colour regions are separated by a dark, zig-zag, mid-lateral stripe running from just behind the eye to the caudal peduncle. Both sexes have a gravid spot when mature.

All the fins are brownish, with the dorsal having two darker crescents in it. The bottom ray of the male's caudal fin is black and the body has very attractive bluish sheen when in good condition.

Aquarium Care

This Platy is a shy, retiring species which does best in a well-planted aquarium with plenty of hiding places. In nature, it comes from warm-water springs and streams which have an average temperature of 34°C (93°F). However, aquarium stocks have now adjusted to cooler temperatures of approximately 26°C (79°F).

Broods are born on a monthly cycle and normally number about 20. The females tend to be short-lived and usually only give birth to three or four broods before becoming too old to breed. Since the new-born fry are often attacked by large adults if they are not heavily fed with live food, it is best to isolate the female to give birth.

Muzquiz Platy

Scientific Name: Xiphophorus meyeri. Schartl & Shröder, 1988

Synonym: Xiphophorus marmoratus. Obregon & Contreras, 1988

This Platy was first described by Schartl and Schröder (1988) in "A new species of the genus *Xiphophorus.*" *Senckenbergiana boil.*, **68:** pp. 311–321, and was named for Herr Manfred K. Meyer.

The type locality is Muzquiz, in the state of Coahuila, Mexico. The type specimen was collected by E. Hnilicka on 22 September 1982 and is a male measuring 27mm (1.1in) S.L. In captivity, males reach 3cm (1.2in) and females 4cm (ca 1.6in). The Muzquiz Platy is only known from the type locality and closely allied headwater springs and ponds.

This is one of the most recently described species of *Xiphophorus* and is an extremely close relative of the Monterrey Platy (*Xiphophorus couchianus*). In body form, it is similar to the Monterrey Platy and has the same strong bicoloration, with the back and upper sides dark brown, and the belly and lower ventral regions whitish. The male has two dark crescents in the dorsal fin. The female has the same coloration, although it is much reduced. Both sexes can have heavy black speckling along the flanks, but unspotted individuals occur in the wild.

Aquarium care

This species has many of the attributes of its close relatives, being somewhat touchy about its tank conditions and it is difficult to establish in a new set-up. It is a somewhat more nervous species than the Monterrey Platy and, in general, will not be seen swimming about the aquarium very much at all.

They prefer to hide in the corners or among the plant cover, which seems to be an absolute must for them to do well. This nervousness will, in all probability, abate as the fish is taken through several generations in the aquarium.

They eat all foods, but will do best if fed on a diet with a very large percentage of live foods, as opposed to flake food.

The fry are born on a monthly cycle, but this can be a little erratic, with females having a resting period during the winter months. Average brood sizes have, so far, been about 15, but up to 40 have been known. The fry grow fairly quickly and start to sex out from about the fourth month onwards. Females become reproductive at between four and six months old.

Last words

As a group, Platies have been studied more closely than many other fish. This is because it was discovered quite early on that cancer tumours would be produced by certain hybrids at a given age. This meant that the mechanisms which cause cancer could be studied in fish before, during and after the cancer tumour had developed, virtually a unique situation which allowed some very important research to be undertaken.

Apart from the information gleaned about cancer, some fascinating material about colour morphs, age of maturation and eventual adult size has also been uncovered.

I hope this series of articles has whetted your appetite for more information on Platies and Swordtails, because, in the autumn, a new book on this subject is to be published by Cassell's. [*Platies and Swordtails – An Aquarist's Handbook, by Derek and Pat Lambert*]

Further Reading

In addition to the various references cited in my three articles I would strongly recommend the following:

Rosen, D.E. (1960) Middle-American poeciliid fishes of the genus *Xiphophorus*. *Bull. Florida State Mus., Biol Sci.,* **Vol. 5, No. 4:** pp. 57 – 242



A female Monterrey Platy from Austreca Canyon.



Mature Cuatro Ciénegas Platy male.



A nicely patterned male Muzquiz Platy. [Editor's note:- Please forgive the quality of these photographs; I had to take photos of the originals in the magazine and paste them here.] Acknowledgments

[Derek wrote in the original article.]

I am indebted to "Aquarian" for their sponsorship of the Aquarian Endangered Species Survey 1993, which allowed me to study the wild habitats of these highly endangered species of fish. My thanks also to James Langhammer and Jim Chambers for their help with obtaining scientific papers, and also Andres Tveteraas and Daniel Falgerho for allowing me to use their photographs.

Final Editor's note:- In doing a little background research of my own on these endangered Platies I came across an excellent article about them on the website of the Xiphophorus Working Group, xipho.org, and can recommend taking a look at that also.

Live-bearing Halfbeaks

By Ulrike Korte

Part I

The genus Dermogenys



Dermogenys siamensis Male from Pak Chong, Thailand. Photo: Dieter Bork

Presenting all the live-bearing halfbeaks you can encounter in the aquaristic scene I would like to start with the genus *Dermogenys* as they are the most widespread species in the aquaristic trade and in their natural distribution range as well.

Let's begin with a bit of the history of their taxonomy just to understand what's going on and to be able to assess which species we may encounter in the trade or even keep in our home aquarium.

Some decades ago, when I was a child, in our pet shops there were two taxa of the genus *Dermogenys* on offer – *Dermogenys pusilla* (formerly *pusillus*) and *Dermogenys siamensis*. For aquarists the difference between these two species was that *Dermogenys pusilla* was of greyish body colour with red and yellow markings in their fins and beak and *Dermogenys siamensis* was the silvery one. Today we know for sure that the silver halfbeak is a selection morph and not a natural species on its own. Though their silver body colour may look great and attractive to aquarists, I would ask you please do restrain from them. Scientists have found out that while growing up, specimens of the silver halfbeak develop silver scales that overgrow their eyes and leave the fish blind. Some keepers of the silver halfbeak will know about this phenomenon.

The last comprehensive revision of the genus *Dermogenys* was made by Amy Downing Meisner in 2000 and in this revision *Dermogenys siamensis* is quite a different halfbeak than the silver one.

Up to then, several species of *Dermogenys* were placed in synonymy to *Dermogenys pusilla* and thus for a long time there was an extensive use of the taxon *Dermogenys pusilla* for *Dermogenys* species in museum collections and literature entailing the broad use of the taxon *pusilla* in the aquaristic scene.

Corresponding to her revision of the genus *Dermogenys* Meisner erected two clades of *Dermogenys* species and the first and for aquarium homekeeping the most interesting clade is the *Dermogenys pusilla* clade.

This clade comprises four species as follows:

Dermogenys burmanica with their distribution range Myanmar and Bangladesh
Dermogenys collettei distribution range Sumatra, Malaysia, South Malay Peninsula, Indonesia, Singapore, Brunei
Dermogenys pusilla distribution range Java
Dermogenys siamensis distribution range Thailand, Vietnam, Cambodia

Considering the distribution areas of these four species it may be easily assumed that most of the specimens named *Dermogenys pusilla* in our aquaristic shops will most likely be *Dermogenys collettei* or *Dermogenys siamensis* for in her revision, Amy Downing Meisner limited the nomen "*pusilla*" to populations only native to the island of Java.

It's not easy to tell the four species apart by sheer appearance. Even within a population there may be a variety of red and yellow markings. The easiest way for determination would be to know their collection site. As in most cases this won't be possible. I tend to call *Dermogenys* species of this clade I come across in the aquaristic scene a species or specimens of the *Dermogenys pusilla* group. This is adequate because maintenance guidelines for care requirements of captive populations are rather the same in all four species in the *Dermogenys pusilla* group.



Dermogenys siamensis Female from Ko Pangou, Thailand. Photo: Dieter Bork



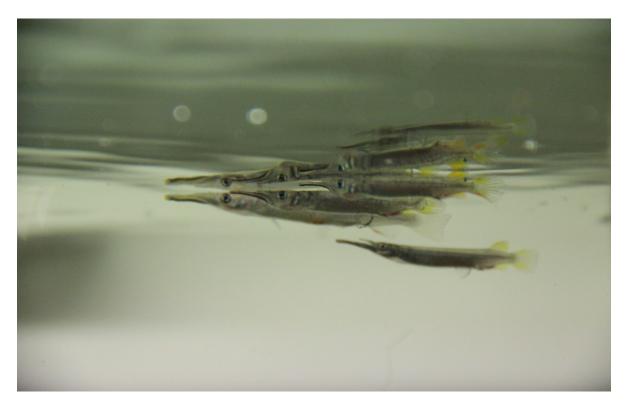
Dermogenys siamensis female from Phuket, Thailand. Photo: Dieter Bork



Dermogenys collettei Photo: Dieter Bork



Silver halfbeak, male; University of Stockholm. Photo: Charel Reuland.



Dermogenys halfbeaks at the University of Stockholm. Photo: Charel Reuland.



Silver halfbeak, gravid female; eyes beginning to overgrow. Photo: Charel Reuland



Silver halfbeak with overgrown eyes. Photo: Charel Reuland.

Captive care requirements

Populations of the above mentioned *Dermogenys* species occur in every kind of water bodies, stagnant and flowing waters. They inhabit streams, creeks, tributaries to larger rivers as well

as lakes, ponds and often settle in agricultural areas like rice fields and irrigation canals. They even colonise the brackish waters of mangroves in estuaries and deltas.

Populations of captive lineages are not fussy about the chemical make-up in our home aquaria and do well in a broad temperature and water value ranging from 22°C to 28°C and neutral to slightly hard water. In summertime there is no objection to keeping them in the garden with night temperatures sometimes falling down to 18°C for a short time.

The only exception to their resilience are individuals caught in the wild. Before you can rely on acclimating their potential offspring it is crucial when maintaining the parental specimens to stick to the water parameters found in their natural habitat.

Besides their elongated lower jaws, a further biological characteristic in *Dermogenys* specimens are their protruding nasal barbels (a feature they share with other closely allied halfbeaks).

Live-bearing halfbeaks exhibit a conspicuous sexual dimorphism . In *Dermogenys* females are a lot bigger than males. Adult males attain a length of 6 cm while some females can reach up to 9 cm. The anal fin of the males is modified to form an andropodium, the equivalent of the gonopodium we know from live-bearing toothcarps like guppies and mollies. The anal fin of the female is rounded. Coloration in males is more intense than in females and the elongation of their lower jaw, the "beak", is more striking.

These fish are surface dwellers. They do not need tanks of big water volume but they need large surface space with an open center to swim and some floating plants as a shelter. An aquarium with shallow waters and large surface extension will make a good choice. It's judicious to cover their tank with a tight-fitting lid, at least during their first time when they have not yet got accustomed to their new surroundings.

If you do not want to keep them in a species tank but in a community setting, mix them with inoffensive tankmates that prefer living in the middle of the water column or at the bottom of the aquarium. Make sure that heterospecifics housed with *Dermogenys* species are big enough so not to fit in the halfbeaks' mouth. *Dermogenys* – like all other live-bearing halfbeaks – have a carnivorous lifestyle. This is an advantage for your aquarium plants, but very risky for smaller fish.

For housing with *Dermogenys* species, livebearers like *Poecilia* or *Xiphophorus* species make a good choice, as the halfbeaks will relish their tankmates' fry.

Though *Dermogenys* may eat flakes and pelletized foods, on such a diet they will become stunted and sooner or later they will fade away. All kinds of frozen meaty food will serve well. Concerning frozen food, I recommend glassworms because they remain floating on the water surface which corresponds to the feeding habits of *Dermogenys*.

By far the most appropriate food they can be offered is live food. They would thrive on mosquito larvae, glassworms, daphnia etc. Fruitflies (*Drosophila*) constitute a sound and practical staple diet. You can easily find them in the terrarium trade and even have a go and start breeding them yourself.

Depending on respective captive lineage, males can reveal a rather aggressive intraspecific disposition, especially towards other males. Agonistic interactions also occur between females and males and even among females.

These fish have been observed in the wild to live in shoals and they do best in a gender - mixed group, but need large open surface areas and some hiding places for shelter. If you only have available smaller tanks (water surface below the standard $1m \times 40$ cm), it's closer to the optimum to keep only one male.

To start, reproduction approaches a great advantage is a phenomenon we all know from guppies and their likes: inherent to reproduction pattern of all live-bearing halfbeaks is the ability of sperm storage. So if you miss their first spawn when trying to reproduce them – for instance if the newborn fry have all been devoured by their tankmates – just stick to this female that has given birth, separate her and wait for some more weeks until sooner or later she will give birth again. Depending on temperature, gestation time will take about a month up to six weeks.

Females possess paired ovaries. In each ovary, scientists have found up to 20 embryos. They are all in the same stage of development. So one batch can result in 40 babies but there is evidence from some breeders that they may exceed these numbers by far.

Newborn *Dermogenys* measure around 1 cm and do not yet show their characteristic beak. Elongation of their lower jaw will develop later.

In their first days, fry will thrive on artemia and other tiny live food, but very soon they need a diet of bigger size. I would, among others, recommend springtails. You can find them in the terrarium trade and easily reproduce them yourself. It will not take long and you can offer the juveniles the same diet as you offer the adult specimens. They will fare well on such a sound diet in conjunction with regular partial water changes.

Specimens of the *Dermogenys pusilla* – clade are highly recommended for the newcomer in the maintenance of live-bearing halfbeaks for they are not difficult to maintain, commonly available and feature the most primitive reproduction pattern among live-bearing halfbeaks.



Dermogenys siamensis Female. Photo: Dieter Bork



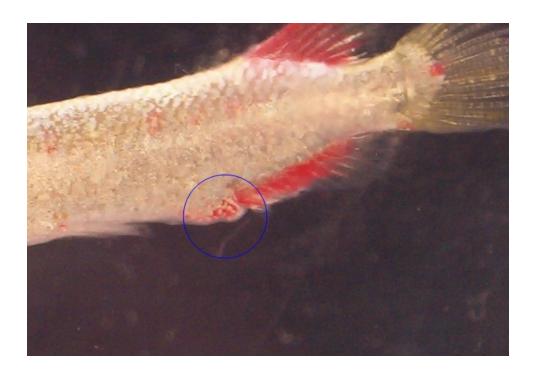
Offspring develop their beak while growing up. Photo: Dieter Gentzsch.



One batch of fry from *Dermogenys pusills*-group. *Photo: Kay Urban*.



Female with rounded anal fin. Photo: Jean-Michel Hromada



Male with modified anal fin. Photo: Jean-Michel Hromada

Photos from Dan Fromm



Brachyrhaphis cascajalensis male



Brachyrhaphis holdridgei Río Matina male



Brachyrhaphis holdridgei Río Matina female

Diary dates:

1. Summer Show Number 1 - Basingstoke

When: Sunday 1st June.

Where: Kempshott Village Hall, Pack Lane, Basingstoke, Hampshire, RG22 5HN.

Further details will be on the BLA website nearer to the time.

Auction: For your auction letter and booking form, please see the BLA website.

2. Summer Show Number 2 - Cumbria

When: Sunday July 6th

Where: Harraby Catholic Club, Edgehill Road, Carlisle, CA1 3PQ.

Further details will be on the BLA website nearer to the time.

Auction: For your auction letter and booking form, please see the BLA website.

3. Autumn Convention - Midlands

When: Saturday and Sunday, September 20th and 21st.

Where: Shenstone Village Hall, Barnes Lane, Shenstone (Near Lichfield), WS14 0LT.

Further details will be on the BLA website nearer to the time.

Auction: For your auction letter and booking form, please see the BLA website.

Other events:

The above are all BLA events but there are others. The American Livebearer Association are having their convention along with the American Cichlid Association, the American Killifish Association and other groups in San Antonio, Texas, on June 12th to 15th and have issued an invitation to anyone from any of the European livebearer associations to join them. If you are interested there are further details on the ALA website. If you do attend the convention I would love to hear how you got on.

The Goodeid Working Group are holding this year's convention in Gent, Belgium on 3rd to 5th October. There are only thirty places available so if you want to attend I would advise you to check the GWG website and book your place as soon as possible.