

CATCHAT

THE JOURNAL OF THE CATFISH STUDY GROUP



***Corydoras boesmani* *Rineloricara* sp L010A**

Sturisoma aureum* *Hypodoras forficulatus

***Scleromystax* 'Part 4'**

CSG Autumn Auction Product Reviews

What's New?

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Diary Dates - 2012

Date	Meeting	Details
Jan 15th	2012 AGM	
Feb 19th	Spring Auction	
March 16th - 18th	Annual Convention	
April 15th	Adrian Taylor	“Catfish Habitats” - EGM.
May 20th	Spring Lecture	
	Dr David Price	“Aspects of Mexican freshwater fish conservation”
June 17th	Colin Eveson	“My way- care and breeding of aspidoras”
July 15th	Danny Blundell	“Peru 2011 Pt1”
August 19th	Summer lecture	To be confirmed
September 16th	Open Show and Auction	
October 21st	Mark Walters	“The challenges of Breeding & Raising Catfishes”
November 18th	Autumn Auction	
December 9th	Christmas Meeting	To be confirmed

Auction lot pre booking David Barton 01942 248130

Monthly meetings are held at the **Highfield Congregational Church Hall, Edmund Street, Darwen, Lancs, BB3 2DL** on the third Sunday of each Month from 1pm.

Auctions and the Open Show will be held at the **Derwent Hall, George Street, Darwen, BB3 0DQ.**

The convention is held at **The Kilhey Court Hotel, Chorley Road, Standish, Wigan, WN1 2XN.**

Contents

Editorial and Notices	2
Autumn CSG Auction - Mark Walters	4
<i>Corydoras boesmani</i> - Ian Fuller	5
Product Reviews - Mark Walters, Ian Watson	9
<i>Scleromystax</i> Part 4 - Mark Walters	10
<i>Rineloricara</i> sp L010A, Red Lizard Whiptail Catfish - Ian R. Fairweather	14
Breeding <i>Sturisoma aureum</i> - Mark Walters	16
What's New? - Mark Walters	20
<i>Hypodoras forficulatus</i> Eigenmann 1925 The Battleship Dora - Steve Grant	22

Front cover – *Sturisoma aureum* , male guarding eggs – Image by Mark Walters

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**Publication of the Catfish Study Group Journal
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Editorial

Happy New Year to you all. I wish you every success in your catfish keeping and hopefully breeding.

2012 marks the start of my third year of editing the CSG journal CatChat. The last two years have seen some significant changes in the presentation, layout and finishing of the journal, improving its standing as a well respected publication. I am sure this has helped attract many new articles and features, reducing the lack of copy and the need to reprint old material.

The journal is now produced on higher quality paper and has many more images of a higher quality. A further benefit has been the proof reading of the journal by our President, prior to final printing. Although I produce the first proof in Microsoft Word, the final version needs a publishing conversion. Ian Fuller has taken on this role and takes the time to offer a sanity check before final issue to the printers.

Although there have been a few niggles with typesetting slipping though the net, the overall benefit outweighs any minor typos.

In addition to the usual reports on regular CSG events, we have been the first to publish articles on new descriptions, first-time spawnings, observations on catfish behaviour and maintenance and summaries of specific catfish families. This makes the journal an essential resource for all enthusiasts.

The usual message needs to be reiterated. The journal is composed of many articles from a few contributors. I would encourage more members to submit their experiences and would be happy to help with images and editing as needed. I would also welcome more regular features from Committee members to promote the club and its regular activities.

The January 2012 edition features product reviews for foods and publications. I'm more than happy to feature reviews (hopefully good!), for any catfish related products from readers. It can only be of benefit to make recommendations which have helped you become more successful in your catfish keeping.

If any manufacturers want to donate products to the club for fund raising purposes (raffle, auction or show prizes) we will endeavour to provide suitable reviews and acknowledgement through the journal and website.

In this edition, we have a review of the November auction, regular What's New feature, breeding reports on *Corydoras boesmani*, *Hemiloricaria parva* and *Sturisoma aureum* and the final installment to my *Scleromystax* series, with information on three rarely encountered species and an update for a newly recognised one.

I look forward to seeing many of you at the Spring auction in February and of course the Convention in March.

Correction

In the last edition, a line was omitted from the end of Ian Watson's piece on water flow. The final paragraph should have read:

'Finally, I will leave you with this to consider. Parancistrus nudiventris was described from the rio Xingu where it is found in flows described as "moderate to strong", i.e. 40 – 190 cm/second. I will leave you to figure out how to make that cat feel at home.'

Makes you wonder quite how much adrift we are when trying to recreate a natural habitat for our precious catfish.

Mark.



Notices

Catfish Study Group

The Spring auction on 19th February, will be held at a new venue – the Derwent Hall, George Street, Darwen, BB3 0DQ. This follows the closure of the Highfields Working Men's Club. Further details of venue changes will be posted on the CSG website.

You can now follow the latest information and chat on our Facebook pages. Hopefully this will raise awareness and further promote CSG activities to many more aquarists who make use of social media.

There will be an Extraordinary General Meeting (EGM) at the April meeting. This meeting will hear the minutes from the 2011 AGM and matters relating to the constitution. Further details have been issued with the journal.

Preston AS

Preston Aquarist Society have announced their 3rd annual conference. For further details of this and other Preston AS events this year contact the number below:



PRESTON AQUARIST SOCIETY

3rd Annual Conference - 23rd September 2012

<p style="color: red; margin: 0;">Morten Ask</p> <p style="margin: 0;">Fish Collector (Norway)</p>	<p style="color: red; margin: 0;">Hans Georg Evers</p> <p style="margin: 0;">Editor- Amazonas Magazine (Germany)</p>	<p style="color: red; margin: 0;">Colin Dunlop</p> <p style="margin: 0;">Fish Importer (Scotland)</p>
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Informal Evening Discussion - Hosted by Brian Walsh

Tickets £12 - includes buffet lunch

All attending are invited to bring lots for a quality auction.

Guest societies will be in attendance

Venue - The Mill Hotel, Croston, PR26 9HP

Tickets and further details coming soon, or tel. 07721521681



Castleford Aquarist Society

Castleford Aquarist Society has announced the dates for two key events in 2012. The Annual Open Show will be held on the 22nd April and on 8th July the club hosts its 4th specialist Catfish and Loach show.

This year the July event hosts the National Catfish Champion competition, open to any catfish which have achieved a Best in Show or years CAS Catfish and Loach Show (10th July 2011). The special competition will be sponsored by Pier Aquatics and promises to be a hotly contested event.

Both events will be held at the Lock Lane Centre, Back William Street, Castleford, WF10 2LW. For further details contact Steve on 07833 400924.



CSG Autumn Auction

Mark Walters

The annual November auction was one of the most exciting I have attended. I travelled over to Darwen with my Castleford Aquarist Society colleagues with a couple of boxes of fish, including *Corydoras* CW09, *Scleromystax barbatus* and *Hypancistrus* L066 to offer in the sale. There was a fair amount of exchange of fish between breeders before the start of the auction and most seats were filled by the 1p.m. start.

From the outset, bargains were on offer and during the course of the three hours, there was probably the largest range of Corys I've seen at auction with some fantastic groups of adult fish.

Best prices were for buckets of breeding groups of *C. sterbai* (£43), *C. leopardus* (£41), and pairs of CW030 (£20) and young *C. eques* (£25).

I picked up the CW030, 8 *C. eques* and some cracking C123, plus a few other bits.



Corydoras sp CW030, 'Vitoria' – image by Steven Grant

Here's a list of all catfish species that went through:

Corydoradinae

Corydoras weitzmani, *C. paleatus* (albino), *C. concolor*, *C. panda*, CW09 (green laser), *C. elegans*, *C. sterbai*, C123, CW038, C132, *C. melini*, gold laser, *C. pygmaeus*, *C. ambiacus*, *C. habrosus*, *C. loxozonus*, *C. atropersonatus*, *C. gomezi*, *C. robineae*, *C. axelrodi*, CW021, C003 (*deckeri* – massive fish, breeding group), *C. semiaquilis*, *C. undulatus* (breeding trio), C89, *C. eques* (F1's), *C. sterbai* (breeding groups – big fish), *C. aeneus* "Black" (and breeding group), *C. nijsseni*, *C. longipinnis*, C096, CW030 (*vitoria*), *C. davidsandsi*, C018, *C. burgessi*, *C. trilineatus*, *C. leopardus* (bucket of big fish).

Aspidoras taurus and breeding group of unidentified *Aspidoras*. *Brochis splendens*



Peckoltia oligospila – Image by Steven Grant

Loricariids

Hypancistrus L066, *Peckoltia oligospila*, *Ancistrus* sp.1, sp.4, Red & Black, A. L182, *Hemiloricaria lanceolata*, *Leleilia* 'red' (breeding pairs), *Otocinclus* sp, *Farlowella* sp, *Sturisoma* sp. Columbia, *S. panamense*, *Sturisomatichthys* sp., *Deckeyseria* L052, *Baryancistrus beggini*,



Auchenipterichthys coracoides – 'Zamora woodcat' – Image by Mark Walters

Other catfish

Trachelichthys taeniatus, *Microglanis iheringhi*, *Synodontis nigriventris*, *S. alberti*, *Tatia gyrina*, *Megalodoras irwini*, *Auchenipterichthys coracoides*, *Megalechis picta*



Tatia gyrina – Image by Steven Grant

Thanks are due to all the CSG committee, runners, organisers and of course our indomitable auctioneer Steve Spence.

Breeding Boeseman's Cory

Ian Fuller



Corydoras boesemani - male

Since its description *Corydoras boesemani* (Nijssen & Isbrücker, 1967) had been one of most desired of *Corydoras* species, but it was not until late in September of 2006 that the first live specimens appeared in the hobby.

It was the highly regarded German Catfish expert Ingo Seidel who visited Suriname with the intention of finding and collecting these and other desired species. Ingo is an accomplished fish breeder and it was not long after his return that he successfully bred and raised the first of many batches of this delightful little fish.

I was in May 2008 while attending an aquatics event in Norway that I first acquired a group of eight very young F1 fry from Ingo, he did warn me that they were only a few weeks old and not very large, much smaller in fact than he would normally be prepared to release, but I was prepared to gamble on their survival back home to the UK.

Two of the smallest did not make it past the first two days in Norway, but the remaining six were in really good shape and not only made the trip back but grew on to adulthood.

They were initially housed in one of my shallow tanks (45 cm x 27 cm x 18 cm), which are normally used

for small species or fry rearing. The tank was furnished with a thin layer of very fine smooth grained sand, a large portion of Java moss and a potted *Anubias nana*. Filtration was with a 20 cm x 10 cm x 5 cm air driven 30 ppi sponge filter. The six fry grew very well and at six months and were around 35 mm standard length (SL), one specimen was a little larger at almost 40 mm SL. This I took to be a female, but all the signs like body and fin shape pointed to it being another male, which was disappointing to say the least.



C. boesemani – female

To begin with the newly acquired fry were fed on grindal worm, sifted *Daphnia*, newly hatched brine shrimp and powdered flake made into a paste.

As they became larger the size of the foods offered also became larger until they were ready to go on to my standard Cory diet. This consists of a variety of commercial foods, including Tetra tabimin, Aquarian tablets or pre-soaked quality flake food, supplemented with live or frozen Bloodworm, live daphnia, white worm, tubifex or chopped earthworms.



C. boesmani at 7 days

The first signs that I did indeed have a female, which did turn out to be the largest specimen, was late one evening in early April 2009, when after making my feeding round of the fish house and completing some water changes, I sat down as I normally do to watch and enjoy my fish.

There appeared to be a lot of activity in the *C. boesmani* tank, so I took up a better position and sat there watching them. However because of the amount of Java moss in the tank it was not that easy to see the action, most of it taking place behind or in the moss itself.

All five males were very restless and were paying the female a lot of attention, making little dances over her back and head, and what appeared to be tickling her with their barbels, then occasionally hovering in front of her arching their quivering bodies trying to entice her into a mating clinch.

This courtship activity continued for an hour or so before the female moved into a mating clinch with the most persistent male, this may not have been the first mating clinch, but was certainly the first one observed. Needless to say I was very excited on two counts, firstly knowing that I did in fact have both sexes and at the prospect of raising what would be the first *C. boesmani* to have been bred in the UK.

However those thoughts were soon dashed all be it temporarily, when I saw other males eating the eggs almost as soon as the female had deposited them. I immediately decided to take the excess males out of the tank, leaving just the female and the one male, which seemed to be the most dominant and the one the female seemed to favour the most during the time they were being observed.

the most dominant and the one the female seemed to favour the most during the time they were being observed.

The disturbance of removing the four males stopped the mating activity for a while, which was to be expected. I thought it would be a couple of days if not more before there would be a resumption of any mating activity, but it could have only been a few hours.

The following morning when I went into the fish house to give my groups of young fry their morning feed, I could see a few eggs attached to the edge of one of the Anubias leaves, then on closer inspection I could see there were quite a few more distributed on other leaves, after watching them for a while they gave no indication that they were interested in eating the eggs so I decided to leave well alone to hopefully continue and went to work.

Later that evening it was obvious that spawning had ended and that both fish had little or no interest in the eggs, so I decided to leave the eggs to develop where they were for at least another day. Whether the hormones released at the time of mating or there are other secretions released into the water at that time of the spawning that help protect the eggs I am not sure, but there is something in the water that does make a marked difference.

I have found with some species, that if eggs could be left in the spawning tank with the adults up until a few hours before they were due to hatch, there would be a far better hatching rate.

In the case of the *C. boesmani* on day three after the spawning I added two litres of water from the spawning tank into a three litre hatching container and added an air stone, then I carefully removed the eggs from the leaves of the Anubias and put them into the container, all in all there were twenty three, 1.2 millimetre diameter eggs.

The following day all twenty three had hatched out and could be clearly seen on the bottom of the container, it was a further two days before they had used up their yoke sac and were free swimming.

The first food given to these tiny fry was micro worm; this was followed the next day again with micro worm in the morning and then powdered down tablet food given in the evening after a seventy five percent water change, with the new water for the fry container being taken from the spawning tank, which is then topped up with new clean water.



C. boesemani fry at 4 weeks

As the fry grew the size of their food was also increased and followed my normal feeding regime as described earlier. One of the things I have discovered with this species and is typical of quite a number of species is that the fry from eggs that have been collected within the first few hours of being laid do not do very well and are very hard to raise.

This is probably because the eggs membrane when laid is very delicate, the surface of it has channels and open pores to guide and allow the males sperm to enter and fertilise, it is only after a couple of days the outer membrane seems to toughen up and in all probability the pores close after fertilisation.

I now have a breeding group of three males and two females housed in a 75 cm x 25 cm x 25 cm heavily planted tank with an eight to ten millimetre layer of fine sand, a forty millimetre thick matt filter at one end and a small internal power filter at the other.

The water parameters in this tank were set at the same levels as they were in the original spawning tank at the time of the first spawning. Temperature 23.5°C (74°F) – pH 7.4 – dGH 5 –

KH 2 – Conductivity 230 (µS/cm). Since the first successes I have found that if kept at the temperature higher at temperatures of around 26°C or 27°C (78°F or 80°F) the group would produce much larger quantities of eggs.



C. boesemani juvenile at 6-7 weeks

My current group spawn regularly twenty-four hours after a normal forty to fifty percent water change and without the need to use any of the recognised triggers such as using water that is considerably cooler than the water removed.

The emerging fry are well protected by the amount of plant growth in the tank, which has six or seven Anubias plants attached to bog wood filling two thirds of the tank and the other third is full of Java moss.

Every seven or eight weeks I will lift the plants out and harvest the young and put them into a tank on their own to grow on, leaving the original breeding group to settle and start producing more young.

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Catfish Study Group 33rd Annual Convention



The Venue

The Kilhey Court Hotel
Chorley Road,
Standish, Wigan,
Lanc's WN1 2XN.
United Kingdom



The Speakers

Binger Kamprath
Ingo Siedel
Eric Bodrock
Regina Spotti
Mary Bailey
Mark Walters

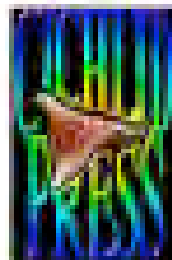
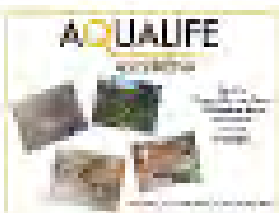


16th-17th-18th March 2012

For full details contact ian@corydorworld.com or visit the CSG website www.catfishstudygroup.org

Convention Sponsors

The Catfish Study Group would like to thank the following sponsors for their continued and most valued support.



Review: Amazonas magazine, the English language edition

Ian Watson

I watched the gradual decline and fall of Aquarist and Pondkeeper with a growing sense of loss and never found anything to replace it, until now. Amazonas magazine has been around for several years but only available in German which was not much use to me. Now, an English language edition has been produced which you can preview at <http://amazonasmagazine.com/> (just click on "Current Issue").

It is an excellent magazine, well written and well edited and with superb photography. Despite the name, the magazine deals with much more than the Amazon and there are features on plants, shrimps and snails (it may sound like an oxymoron, but these are really interesting snails and quite pretty too) to satisfy your wider aquarist interests.



There is a lot for the fans of L-number catfish in this issue with three excellent articles on breeding which go into great detail on the essential requirements for spawning and rearing the fry. There are also some useful tips on breeding L-numbers in general and how to set up tanks for rearing fry which should help with the successful breeding of other species. As the magazine points out, with restrictions on exports from Brazil, breeding L-numbers in the aquarium may be the only way to keep some of these fishes in the hobby in the future.

Given the involvement of Hans-Georg Evers in the production of the German edition, I think we can look forward to some good articles on corys and other catfish in the future issues. There are also a couple of pages given over to what is new in trade which, as usual, suggests that the Germans get to see it first.

You can see the current issue free of charge on screen. Navigation is pretty straightforward and you can read the text very easily by enlarging it with a click. I found it easier to navigate around by dragging the page rather than using the up/down and left/right arrows, but that is just personal preference. You really should check this out.

The subscription is not that expensive but postage costs from the US add a lot so you could consider an e-subscription for only US\$22 which will not only save you money but solve the paper storage problem as well. Take a look, you will not be disappointed.

***Scleromystax* Part 4 – ‘The mimics’**

Mark Walters



The rarely encountered *Scleromystax macropterus*

In this final article on *Scleromystax* catfish, I present three species which don't at first glance, appear to fit the norm of typical *Scleromystax*. Further examination confirms their inclusion in the genus and reveals some fantastic fish – if only they were more available in the hobby! I've also provided an update on a newly recognised species, previously presented in the 'lacerdai' article. This brings the number of recognised species to 11, five more than when I kept my first barbatus 10 years ago!

***Scleromystax prionotus* (Nijssen and Isbrucker, 1980)**



Scleromystax prionotus

My first encounter with this species was the publication of a breeding success in a report by Adrian Taylor in 2007. I missed the opportunity to buy some of his offspring in a Catfish Study Group auction in early 2008 but then acquired 6 of his youngsters later in that year. The original specimens were imported by B.A.S. aquatic store in Bolton NW England during 2007. Ian Fuller reports spawning the species back in 1986, although there are few reports of the species' occurrence in the hobby after that date.

The species shares a colour pattern with at least two

other Corydoradinae, *Corydoras baderi* from Suriname and *Corydoras nattereri*. *S. prionotus* cohabits with *C. nattereri* in the white-water streams of South Eastern Brazil. Confusion between *S. prionotus* and *C. nattereri* is common, although side-by-side they are easy to discern. *S. prionotus* is a more slender, longer snouted species with dark scattered dorsal pigmentation and an overall larger adult size.



Dappled pigmentation in head region of *S. prionotus*



Lack of obvious pigmentation in head region of *C. nattereri*

Corydoras nattereri tends to be a smaller stouter species with a more rounded snout a grey shoulder patch below the first spine of the dorsal fin. The lateral stripe is broader and more defined in *C nattereri*. *S. prionotus* also has a hyaline caudal fin whereas *nattereri* has light dappled pigmentation in its caudal fin.



Corydoras nattereri

I have maintained both species in the same tank, although they rarely interact. The direct relationship between these species is unclear, although it can be assumed that mimetic behaviour similar to a number of Rio Negro *Corydoras* species is of benefit to each.

C. nattereri is a small round snouted *Corydoras*, against the larger bodied, longer snouted *S. prionotus*, enabling the species to take advantage of different feeding strategies within the same habitat.

Indeed, other non-Corydoradinae species appear similar to these species and could also be taking advantage of the association, for example the similarly patterned Hypoptopomatine loricariid *Otocinclus affinis*. Although it is not known what benefit the Corydoradinae gain, *Otocinclus* have been observed in the wild grazing on the sides of their similarly patterned catfish cousins. There could be a symbiosis similar to cleaner wrasse or shrimp, or conversely the sucker mouths are the only beneficiaries of this relationship.

It is possible there are variants of *S. prionotus* which have either entered the hobby or exist in the wild. Steven Grant references a specimen tagged 'Crystal azure' in his synopsis of *Corydoras bondi* candidates, although this could be a juvenile form of *S. prionotus*.

Although the colouration and pattern is atypical of the genus, closer examination reveals a number of typical *Scleromystax* traits. There is a clear sexual dimorphism with adult males developing extended pectoral and dorsal fins, and cheek bristles (although reduced in comparison to *S. barbatus* and C112). The sexual differences are less apparent in younger fish, although males are more 'torpedo' shaped than females. The species is reported as being widespread and inhabits many habitats within the

Mata Atlantica rainforest region, from southern Bahia to Sao Paulo. It is reported from the Rio Doce system, Rio himbau, Rio Jundia, Rio Cupido, Rio Cambau, Rio Barra Seca. Rio Jiquia, Rio Daues and Rio de Janeiro.

Back to the keeping of this species, *S. prionotus* seem to relish cooler water than some of the Bahia species, perfectly happy between 16-20C. Prolonged temperature above 23C, appears to lead to more sluggish behaviour in the long term, possibly as a result of reduced oxygen content. In addition to the cool tank temperature, flowing water is preferred from either a power head, external filter return or vigorous aeration.

They share an unusual behaviour with other cool-loving species in that they may partially bury themselves in the sandy substrate. Quite why they do this is open to speculation, but it could be for camouflage or to seek cooler temperatures at the bottom of the water-course.

Spawning is most often achieved after an influx of cooler water, and rain water (or cool deionised water) 'works' especially well. Whether it is the cold water, subsequent increase to room temperature or reduction in dissolved solids is not entirely clear, but in a tank of conditioned specimens, the response is often the same.



Lone *S. prionotus* egg deposited on java moss

Most spawnings take place in a suitable substrate such as a woolen mop, java moss or high on the glass, behind a spawning mop. If the mop is positioned in an area of flow, this is preferred to one offered in a reduced flow position..

In my experience, eggs are cannibalised by parents and other group members, unless removed within a few hours of spawning. Personally, I have found the eggs to be quite sensitive, requiring regularly changed water and active fungus prevention (I usually use methylene blue, although have used alder cone extract). Eggs should hatch after 4-5 days and raising the fry is relatively straightforward using microworm, brine shrimp nauplii and powdered fry foods.



S. prionotus at 4 weeks



6 month old *S. prionotus*

***Scleromystax macropterus* (Regan, 1913)**

I have always been drawn to the less colourful species of Corydoradinae, more interested in the relationships between similarly patterned closely related species like the complex of 'peppered' *Corydoras* (C007, CW024, *C. longipinnis*, *C. carlae*, *C. ehrhardti*, *C. paleatus* etc). One *Scleromystax* species which always intrigued me as appearing like the *paleatus* types was *S. macropterus*.

Before I was able to secure a group, however, the species was added to the list of species banned from export from its home country Brazil. The reason for their vulnerability is not entirely clear, although its habitat is threatened from development, pollution and other anthropogenic sources. It is found south of Sao Paulo down to Santa Catarina, one of the most southerly distributions of a *Scleromystax* species. Like the relationship between *S. prionotus* and *C. nattereri*, *S. macropterus* also shares a mimetic relationship with *Corydoras paleatus* and possibly *Otocinclus flexilis*. It is usual that such relationships are between species of unrelated genus or even family.

The species can be found almost on the shore where the blackwater streams meet the sea. There are a small number of known keepers in the USA and Europe, but the problem with availability in the hobby (other than the export ban) seems to be the lack of breeding success.



S. macropterus amongst the leaf litter

I was fortunate to acquire three specimens in 2007 which pre-dated the ban and had been kept in captivity for around 5 years. Unfortunately the specimens were obviously old and I wasn't able to encourage any spawning activity. I maintained them at a temperature of 18C in an 80 litre tank with lots of bogwood, oak leaves and sand.

Males of the species typically sport extended pectoral fins, although this is more pronounced in some than others. It is reported that males do not tolerate the company of other males and will spar in a fashion similar to *S. barbatus*, CW038 and other *Scleromystax*. I did not witness any serious aggression between conspecifics.

The fish relished a diet of whiteworm, bloodworm and other live foods, supplemented by quality dried granules. My fish lasted a year before they gradually died, showing no obvious signs of spawning behaviour.

I hope other existing keepers have more success and are able to breed and distribute *S. macropterus* and that the species is further protected in its wild environment



S. macropterus feeding on frozen chironomid larvae

Scleromystax salmacis
(Britto 2005)

Corydoradinae enthusiasts were very excited by the publication of a paper in 2005 describing the description of a new *Scleromystax* species. The species, described as the most Southerly occurring *Scleromystax* species, is similar in colouration to *S. macropterus* but lacks the caudal peduncle black spot.

It has a more rounded snout than other typical *Scleromystax* but is still elongate in appearance. Britto (2005) presents *S. salmacis* alongside *S. macropterus* in a distal position from other *Scleromystax* species in the Corydoradinae family tree. There are obvious similarities to similarly patterned species such as *Corydoras paleatus* and the closely related group of 'dappled' Corydoradinae mentioned above. Not enough is known of the wild habits to know if *S. salmacis* enjoys the benefits of, or is exploited by, other species mimicking its appearance.

In contrast to other *Scleromystax*, the species lacks obvious differences between males and females and has certain morphological characteristics similar to *Aspidoras* species. Indeed there are suggestions that *S. salmacis* represents an intermediate, somewhere between *Scleromystax*, *Aspidoras* and *Corydoras*.

Scleromystax salmacis is known from the very South of Brazil, distributed in the Rio Mampituba and Rio Arangua basins. Hans-Georg Evers also reports from a colleague that at certain times of the year, one can find *Scleromystax* species in the Parana drainage of Misiones (Argentina). It is suspected this could also be *S. salmacis*. The species has yet to enter the hobby and there are no images of live specimens available. Excellent images of holotype material and full details of the description can be found in the original paper by Britto and Reis. The species name alludes to the lack of obvious differences between the sexes.

***Scleromystax* sp. CW067**

Hot of the aquaristic press, in December 2011 Ian Fuller (Corydorasworld.com) designated the species previously presented as cf. *lacerdai* as a distinct species - *Scleromystax* sp. 'CW067'.

The species has been successfully spawned in Denmark by Kim Mathiassen whose images appeared in Part 3 of the *Scleromystax* series focusing on the *lacerdai* types. This brings the number of recognised *Scleromystax* species to 11.

Images by the author, unless stated.



Scleromystax CW067 – Image by Kim Mathiassen

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www.catfishstudygroup.org

***Rineloricara* sp L010A, Red Lizard Whiptail Catfish**

Ian R. Fairweather

The origin of this strange fish is completely unknown, it apparently is never listed on any importers lists and it seems no one has any idea what part in the world it originates from. But it exists so what do we know.

It first appeared in the 1970's in East Germany, and that's it! It is probably a red colour variant of what? A hybridisation? A cross of another catfish or a one off a throw back from some distant relative? The only thing is usually hybrids don't produce after the second spawn. But this particular species does, and the red colour doesn't fade. Aquarists have suggested it is a morph of *Rineloricaria lanceolata*. It also has some genes which relate to cannibalism of fry/young.



Male L010A

I first came across this species at an auction in Yorkshire when a friend of mine bought 4, they looked interesting and I made enquires if the seller had any more. My fish were duly bought and they appeared as one male and three females.



Female L010A

They were about 2.0 inch in length, a medium red in colour and quite lively. All four were placed in a tank 18x10x10inch on their own. Furnished with a sand substrate, 21 mm tubes, ceramic broken pots and a piece of bogwood and no plants.

Temp 80F; pH 7.00-7.2; μ s250; KH 2; dGH 8. The tank was filtered using a air operated box filter.

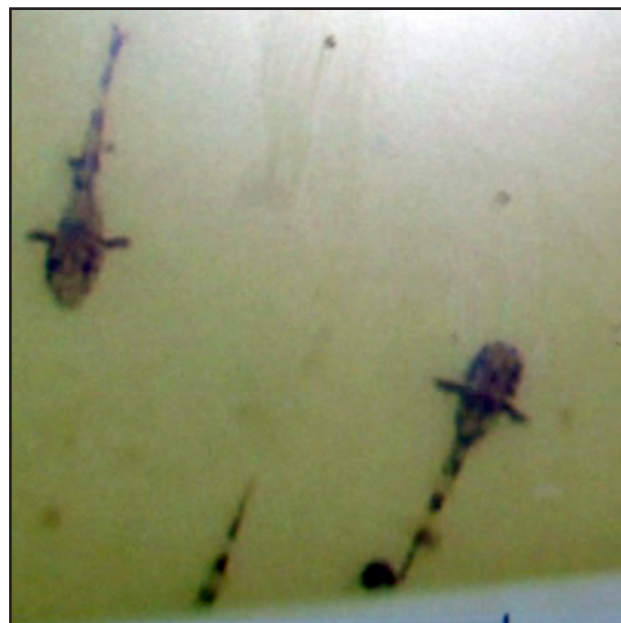
They were offered a variety of foods, Tetra prima, Frozen bloodworm, Frozen brine shrimp, Frozen Red & Black Mosquito & Algae tablets. They were fed twice a day morning & evening. Eight days after they had settled down in their tank, I noticed two fish, a slim fish (a male) and a plump female fish swimming together around the tank just before the lights went out in the fish-house. The next morning both fishes were in a 21mm tube wriggling, which resulted in a pile of light green eggs laid around the inside of the tube.

The eggs laid were approx 44 in number and were 1 to 1.5 mm diameter.

Each day the female "mouthed" each egg.....why? To clean the egg? To help the egg develop or to make it easier for hatching?

Over a period of 7-16 days 42 fry hatched. They were transferred to another tank (as I was informed by another fish-keeper all his fry were eaten by the parents). To get the fry to eat proved to be very difficult, they were offered Liquid fry diluted with their tank water, Green water & micro worm, twice a day. Sadly they all died over a period of 4 weeks.

Within 2 days of the fry dying the 2nd spawning had taken place and approx 36 eggs were laid. They took 6-9 days to hatch. The fry were 5 mm long and were dark brown in colour.



Fry at 1 week.

This time I decided to remove the 3 adult fish (females) to another tank, leaving the fry in the tank they were hatched in. They gathered in a shoal on the rear of the tank near the box filter. I left the remaining adult fish attending the un-hatched fry, and then removed it to the same tank as the others.

With the help of other fish-keepers who gave me instructions of how to make special food for the fry. This food was a home made jelly consisting of "agar" dry seaweed and Spirulina powder.

The jelly was painted on ceramic pots and left to dry before placing into the tank. Banana worms culture was also offered for the first 3 weeks, three times a day.



Fry at 2 months

The fry are born a brownish colour with 3-4 brown spots all over. About 4-5 weeks after hatching the fry changed colour to a pale red. As the fry grew they were given Walter worms, Micro worms, Algae tablets and offered very small Blood worms.



Youngster at 4 months

Thanks to: Keith Myers and Phil Blackburn for helping with the fry food recipe.

Reference: Article in Aquatic Republic.com; Shane's World. PlanetCatfish.

All photos by the author, not to be used without permission.

Spring & Summer lecture meetings

Ian Fuller

Last year, 2011, we tried a new format for two of our meetings, which we called "The Spring Talk" and "The Summer Talk". Although the general consensus was that the meetings were good and the lectures themselves excellent, the attendance was not what we had hoped for. At both meetings we held "Mini auctions" and these actually proved a financial success for the CSG.

However in the light of the poor attendance we have decided to try something different. At the Spring and Summer Talks, the mini auction will be changed to a "Sales Meet". How this will run is really quite simple. The CSG will offer anyone wishing to sell anything aquatic, from fish to equipment, table space for the moderate charge of £15.00. There will be the facility for two people to share one table, but there are conditions to be met. Tables should be booked in advance and paid for on arrival. None sellers (buyers) will pay an entrance fee of £2.00 and for this they will be given 2 raffle tickets for a door prize to be drawn at the end of the day. There will be 3 prizes, each of which will be well worth the door tickets £2.00.

The main advantage of this type of sales is that unlike an auction, where your lot may take from 10 to 30 minutes, you will have up to 4 hours to sell all your wares.

The second and very important point is that you can go onto the CSG forum and advertise – 'Who you are' and what you will be selling by showing a sales list.

Therefore the more you promote yourself the more you are likely to sell. Whether you sell £50 or £500 worth of goods it still only costs you £15.00 for your table, there is no commission as with an auction.

There will, as with every other CSG meeting, be a canteen with the customary "Hot pies" "Tea & Coffee"

On top of all this you get the hear a great speaker,

The quality of the goods sold will be the sole responsibility of the sellers and all transactions will be between buyer and seller, the CSG will not be held accountable for any bad buys.

In the event of excess demand for pre-booked tables, CSG members will have priority. If available on the day, tables will be let on a first come first served basis.

For further details and conditions contact Ian Fuller at president@catfishstudygroup.org

Sturisoma aureum (Steindachner, 1900) – The Golden Royal Whiptail

Mark Walters



Male *Sturisoma aureum* brooding eggs

Although by 2008 I was enjoying success with many Corydoradinae species, the CSG Breeders Award Programme encouraged me to broaden my efforts across more genera.

I had covered *Corydoras*, *Scleromystax*, *Aspidoras* and had started to dabble with Loricariids with breeding success from *Ancistrus*, *Farlowella* and *Hemiloricaria*. I had also recently picked up a copy of the first catfish atlas by Evers and Seidel, which had opened my eyes to Loricariidae and especially the subfamily of Loricariinae. I decided to devote some more time to cracking some more 'whiptail' species, if the opportunity arose.

It was at the 2008 CSG convention that I visited Pier Aquatics in Wigan and was blown away by a tank of golden royal whiptails which I thought would provide a great breeding project. These were not the stick-thin tiny specimens of *Sturisoma* I had seen offered for sale before but big stocky wild caught specimens displaying obvious sexual characteristics and active feeding behaviour. I selected an obvious male with prominent cheek bristles and a likely female.

It can be deceptive because subordinate males and those not in breeding condition often don't carry cheek odontodes. With these specimens it was more straightforward to pick out the most obvious females, considering their girth.

The many experts on hand at the convention and shop confirmed their identity as true *S. aureum*, rather than other species offered including *S. panamense* and *S. festivum*. *S. aureum* hail from the Rio Magdalena drainage of Columbia.

I already had a suitable tank available, although it also housed a colony of *Peckoltia compta* and a few *Aspidoras*. The capacity of the 160 litre tank meant



Male showing characteristic cheek bristles

there would be plenty of room to house the *Sturisoma*. The tank was externally filtered with additional internal air-powered sponge filters.

I had created a terrace of old roofing slates, with plenty of caves for the leopard frog plecs and bogwood pieces. The *Sturisoma* appeared to be happy sat on top of the slates or between crevices.



Female showing rounded belly.

One assumption that many aquarist make when keeping whiptails is that they are predominantly vegetarian. The presence of the suckermouth suggests they enjoy rasping algae and these fish are often purchased to deal with green glass in aquariums.

Although *Sturisoma* will eat plenty of vegetable based foods, including green beans and peas, they prefer to feast on meatier foods, especially frozen bloodworm and high protein foodsticks.

I gained most success in rearing the adults and youngsters using earthworm sticks. Although not widely available in the U.K. they can be sourced. I imported mine from the U.S., which worked out cheaper than buying small quantities from retail outlets.

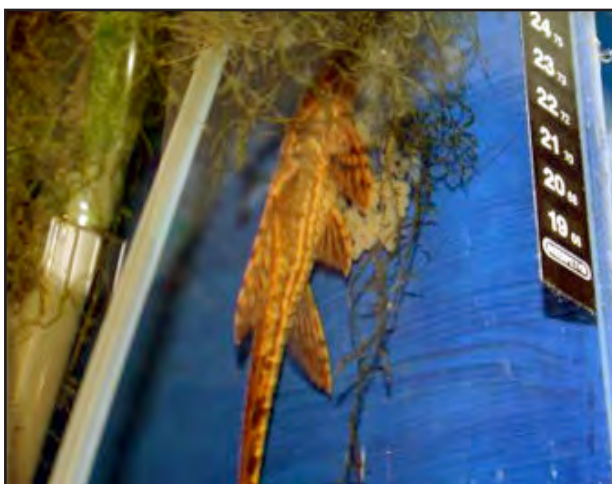


Earthworm sticks

The sticks quickly sink in the water, perfect for catfish, and they soften nicely for younger fish. Tetra Doromin and other quality foodsticks can be used if earthworm sticks are hard to source.

Presented with a good diet, plenty of space and a temperature of around 25C, my *Sturisoma* soon started showing signs of breeding intent. The male developed bristly cheeks and the female filled out noticeably. I was very pleased to discover the first batch of 40 eggs, laid on the vertical plane of the tank, with the male in attendance. This was on the 15th July 2008 and I registered the event in the CSG Breeders Award Programme. Other parameters recorded were a pH of 6 and low general hardness.

Subsequent spawnings were made in different parts of the tank as shown in the following images.



First spawning on tank side.



Second spawning on tank bottom.



Third spawning on a clay tile.

The female played no further part in the guarding of eggs, but the male defended the clutch resolutely. If I put my hand in the tank near the eggs he would launch his body at me, flicking my skin with his tail. *Sturisoma* are quite bony fish and I can well see how his actions could defend the eggs from potential predators.

After 12 days, the eggs had darkened and I could clearly see the developed embryos within the eggs sac. I had read reports from breeders who had used a siphon tube to rescue eggs from similar species, preventing them getting lost in the tank. I found a piece of airline and proceeded to siphon the eggs into a tub. They were clearly ready to hatch and as the eggs fell into the receptacle, they hatched out into fully formed fry.



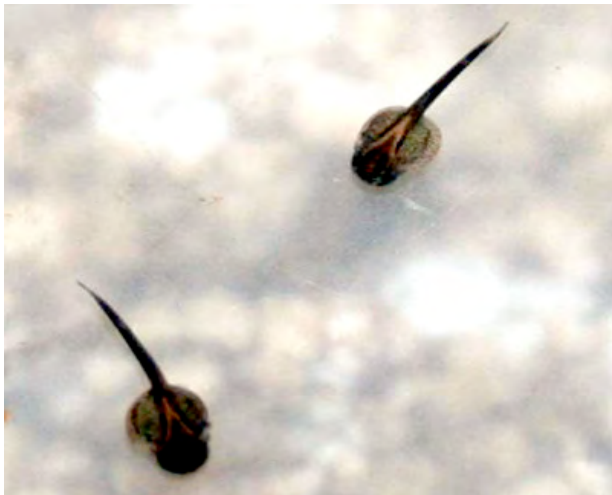
Eggs removed on a roof tile, ready to hatch..

In a later spawning, with eggs that were laid on the roof tile, I simply lifted the tile into a tub and brushed them lightly to release the fry.



Fry starting to hatch from their eggs

If left to the care of the male, I suspect he uses his cheek odontodes to help the eggs hatch. I have witnessed this action when I bred *Farlowella vittatus*, the twig catfish, the male after guarding the eggs would brush his cheek across the clutch facilitating their release.



Newly hatched fry

I placed the fry into a breeding net with throughflow from the external power filter. The fry developed quickly absorbing their egg sac after only 3 days. After this I started feeding with blanched French beans and softened earthworm sticks. As they developed further I included Tetra Prima in their diet. After 10 days had turned from the tadpole shape into miniature adults.



Fry after 10 days

Many aquarists have problems raising *Sturisoma* and other whiptails. It seems they need to be literally swimming in suitable food to encourage them to eat enough to develop properly. This poses problems in a confined trap, so there needs to be throughflow of clean water, using a trap with good circulation.

Uneaten food and debris should be removed as quickly as possible. After 8 weeks, the youngsters were returned to the main tank and reached 75mm after around 4 months, by which time they were ready to pass on to other aquarists. The adults would spawned every 3-4 weeks, during the summer months and I eventually raised many young golden royal whiptails.



S. aureum youngsters after 12 weeks

I would highly recommend *Sturisoma* as a breeding project for a species tank with good filtration, high oxygen content and supply of the best foods available. They are a fascinating catfish with many redeeming qualities.

All photos by the author.

Reference: Evers, H.G. Seidal, I. 2005. Baensch Catfish Atlas Volume 1.



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What's New?

Mark Walters

The following catfish have been seen on offer at U.K retailers: *Pseudolaguvia ribeiroi*, *P. shawi*; *Haraminuscula*, *H. jerdoni*; *Amaralia hypsiura*; *Corydoras*: *C. napoensis*, *C. sodalis*, *C. haraldschultzei*, *C. schultzei*, *C. sterbai*, *C. eques*, *C. pulcher*, *C. reticulatus*, C123, CW028, CW065, *Amblydoras nauticus*, *Hypodoras forficulatus*, *Hassar* sp, *Anadoras grypus*, *Nemadoras* sp, *Physopyxis lyra*, *Leporacanthicus* L240

The following images by Steven Grant were snapped at Pier Aquatics, Wigan recently:



Corydoras Rio Jurua



Ancistrus L255.



Corydoras axelrodi



Corydoras C133



Hypancistrus LDA019



Glyptothorax siamensis



Acanthodoras cf *cataphractus*



Corydoras eques

'Availability' of Brazilian Loricariids

It has also been announced recently that Brazil has released a new 'positive' list of species which can now be legally exported to the aquatic trade. This includes many enigmatic Rio Xingu loricariids which have been unavailable for the last 5 or more years plus the following species to drool over:

Ancistrus:

A. aguaboensis, *A. claro*, *A. dolichopterus*, *A. hoplogenyis*, *A. minutes*, *A. multispinis*, *A. ranunculus*, LDA08, L059, L255.

Baryancistrus:

B. chrysolomus, *B. longipinnis*, *B. niveatus*, *B. xanthellus* L003, L019, L018, L026, L081, L085, L142, L177.

Dekeyseria:

D. amazonica, *D. brachyuran*, *D. pulcher*, *D. scaphirhyncha* L052, L151, L168, L216.

Farlowella:

F. amazon, *F. henriquei*, *F. isbruckeri*, *F. jauruensis*, *F. nattereri*, *F. oxyrryncha*, *F. paraguayensis*, *F. schreitmuelleri*.

Harttia carvalhoi.

Hemiancistrus:

H. sabaji, *H. snethlageae*, *H. pilomma*, LDA 02, L036, L075, L124, L141, L215, L301.

Hemiodontichthys acipenserinus.

Hopliancistrus:

H. tricornis, LDA15, L017, L212.

Hypancistrus: *H. inspector*, LDA 05, LDA 06, L004, L005, L028, L066, L073, L102, L136, L260, L262, L333.

Hypostomus:

H. boulengeri, *H. brevicauda*, *H. carinatus*, *H. carvalhoi*, *H. chysostiktos*, *H. cochiliodon*, *H. commersoni*, *H. faveolus*, *H. luviatilis*, *H. garmani*, *H. goyazensis*, *H. hoplonites*, *H. interruptus*, *H. jaguribensis*, *H. johnii*, *H. lima*, *H. longiradiatus*, *H. multidens*, *H. mutucaae*, *H. nudiventris*, *H. rondoni*, *H. scaphyiceps*, *H. soniae*, *H. ternetzi*, *H. unae*, *H. vaillanti*, *H. varimaculosus*, LDA09, LDA10, LDA51, L037, L137, L166, L224, L233, L310.

Lamontichthys filamentosus

Lasiancistrus:

L. scolymus, L033.

Leporacanthicus:

L. cf. galaxia (L007), *L. galaxias*, *L. heterodon*, *L. joselimai* L029, L172, L264.

Loricaria:

L. lata L010

Loricariichthys platymepodon.

Oligancistrus:

O. punctatissimus, L016, L020, L030, L354.

Otocinclus:

O. affinis, *O. hoppei*, *O. mariae*, *O. vittatus*.

Panaque:

P. ambrusteri, LDA63 (Xingu), LDA77 (Tapajós), L002, L027, L074, L271, L398.

Parancistrus:

P. aurantiacus, *P. nudiventris*, LDA04, L031, L176, L300.

Peckoltia:

P. bachi, *P. braueri*, *P. brevis*, *P. cavatica*, *P. compta*, *P. oligospila*, *P. vittata*, LDA030, LDA078, L006, L015, L049, L146, L076, L099, L121, L134, L135, L205, L232, L305.

Pseudacanthicus:

P. leopardus, *P. spinosus*, L114, LDA007, LDA073, L024, L025, L097, L185, L273, L096, L160, L067

Pseudancistrus:

L259, LDA32

Pterygoplichthys:

P. anisitsi, *P. gibbiceps*, *P. pardalis*, *P. joselimaianus* L083, L165, L196, L001, L022, L021, L023

Rineloricaria:

R. castroi, *R. fallax*, *R. formosa*, *R. lanceolata*, *R. parva*, *R. steindachneri*

Scobinancistrus:

S. aureatus, *S. pariolispos* L014, L048, L133, L253

Spectracanthicus murinus.

Squaliforma:

S. emarginata L011, L035, L108, L116,

Sturisoma barbatum.



Pseudacanthicus sp. L114 – image by Mark Walters

Hypodoras forficulatus Eigenmann, 1925 – The Battleship Dora

Steve Grant

Up until recently I had only seen pictures of preserved specimens and drawings of this catfish. Thanks to Pier Aquatics, Wigan, (UK) I now own 2 specimens and we can see what it looks like in life. It has quickly become one of my favourites and as a result I thought I would provide some details on and share my recent experiences in keeping this wonderful fish.



Juvenile *Hypodoras forficulatus*. Steve Grant

Identity

Hypodoras Eigenmann, 1925 is a member of the Doradidae; subfamily Astrodoradinae.

Its closest relative is *Astrodoras* Bleeker 1862 (Sousa 2010). It can be easily told apart from other astrodoradins by the presence of dermal ossifications (small bony skin plates) immediately in front of the adipose fin (fig 1).



Fig 1: *Hypodoras forficulatus* adipose fin. Red line denotes dermal ossifications. Steve Grant

There is only one species in *Hypodoras* (monotypic) so once you have identified your fish to genus level you know you have *H. forficulatus*.

Etymology

The genus name is made up of the Ancient Greek ὑπο- ('hypo') meaning "under". The etymology of the name 'doras' is "skin" in Greek, with reference to the armour plates. The species name is from the classical Latin word *forficula*, which is derived from the Latin word *forfex*, meaning a pair of shears or scissors.

This is probably with reference to the long pectoral fin spines. When this fish appeared in the trade for the first time in the UK it was imported with the trade name 'Amblydoras Robocop'. It has also been captioned as 'Banjo Ciber – *Acanthodoras* sp'.



Fig 2: *Hypodoras forficulatus* juvenile dorsal view. Red line denotes dermal ossifications. Steve Grant.

I prefer to call it the Battleship Dora. This is because of its grey colouration, its broad body base and tapered upper body, and how it slowly cruises along the bottom of the substrate.

Distribution

Unlike some other astrodoradins this catfish has a limited distribution; so far only being known from the Itaya River and lower Nanay River around Iquitos in Peru (Sousa 2010).



Fig 3: *Hypodoras forficulatus* juvenile ventral view. Steve Grant

Size and Behaviour

My 2 specimens were around 4.5cm Total Length when I purchased them late September 2011. At the time of writing (early February 2012) they are around 9.5cm TL. The largest specimen recorded so far is 10.4cm Standard Length (Sousa 2010).



Fig 4: *Hypodoras forficulatus* semi-adult. Steve Grant

It is peaceful to other fish though I have noticed that when the two specimens meet they sometimes have a little nip to scare the other off. They do not appear to do any damage to each other though. They prefer to hide under the sand with just their mouth, eyes, and dorsal fin spine showing. They will stay like this until food is added to the tank and then they emerge from the sand like mini submarines and cruise around for food. Although they will eat with ambient light they do seem to prefer nocturnal feeding. They can be a little shy sometimes if there are bigger and boisterous fish in the tank so please keep them with fish of similar size and temperament.

Aquarium care

My specimens have done well in slightly acidic water at a temperature of around 78°F.

They should be provided with a substrate of sand, with enough depth to enable them to bury themselves, see fig 5. Mine have been provided with an overhanging piece of mopani wood which they position themselves under when burying in the sand. This overhead shelter seems to make them more at ease.



Fig 5: *Hypodoras forficulatus* buried in sand. Steve Grant

They are not fussy feeders and mine eat frozen bloodworms, Tetra Variety Wafers and Tetra Prima. They also relish chopped earthworms.

It is likely that the sexes can be externally differentiated by females having a proportionately wider and deeper body than the males. There may also be differences in the vent area.

Summary

To summarise, this is a peaceful, rare, and unique fish and would advise anyone interested in catfish to obtain some while they have chance. You won't be disappointed.

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Tese de doutorado. Universidade de São Paulo, São Paulo, p. 276



Hypodoras forficulatus from Eigenmann 1925

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Two green parrots are perched on a wooden branch, facing each other. The parrot on the left has a speech bubble above it containing text. The parrot on the right has a speech bubble above it containing text. The background is a gradient of light blue and green.

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