

THE JOURNAL OF THE CATFISH STUDY GROUP

Furthering the study of catfish



PlanetXingu Update

Focus on *Scleromystax*

Yorkshire Aquarist Club Tour

CSG Autumn Auction

An Introduction to *Hypancistrus*

What's New?

The Latest CW Numbers

Hot Cory's

Seeing the Light

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Diary Dates - 2014

Date	Meeting	Venue
February 16 th	Spring Auction	Derwent Hall
March 14 th /15 th /16 th	Annual Convention	Kilhey Court Hotel
April 27 th	Discussion on filtration	Darwen Valley Community Centre
May 18 th	Discussion on Catfish breeding	Darwen Valley Community Centre
June 8 th	Summer lectures and Sales Meet	Derwent Hall
July and August	NO MEETINGS	—————
September 21 st	Annual Open Show and Auction	Derwent Hall
October 19 th	Discussion on ‘L’ numbers	Darwen Valley Community Centre
November 16 th	Autumn auction	Derwent Hall
December 14 th	Christmas meeting	Darwen Valley Community Centre

Monthly meetings are held on the third Sunday of each month except, where stated.
 Meetings start at 1.00 pm and are held at the:

Darwen Valley Community Centre, Sudellside Street, Darwen, Lan’s BB3 3DL

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

The Annual Convention is held at

The Kilhey Court Hotel, Chorley Road, Standish, Wigan, WN1 2XN.

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Front cover – *Pterodoras granulosus*. Image taken by Ben Nicholls at Pier Aquatics, Wigan, UK

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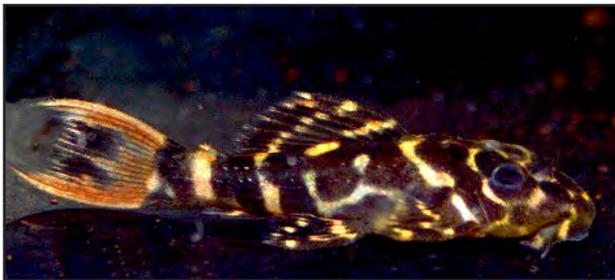
Editorial

Welcome to another packed edition of the Catfish Study Group Journal. A special welcome to new CSG members, many of whom have joined as e-members, receiving the journal as a pdf. I hope the technology hasn't beaten us! It's been a busy few months since the last edition, not just with Christmas and the holiday.

We have had our annual Autumn auction and a productive Annual General Meeting, at which we welcomed our new Chairman Bob Barnes to take up the reins for the next three years.

Other roles were duly filled, although we could still do with support in promotions and merchandise if any members have the necessary skills at their disposal. Please contact the committee through the website or Facebook pages if you would like to help in the running of the club.

I've had a successful time in the fish house with lots of young fish growing on for forthcoming auctions and to offer at the Convention. My greatest achievement has been spawning a new species, *Pseudacanthicus* sp. 'L114'.



10 week old L114

The leopard cactus plec is a popular fish for catfish enthusiasts but not often spawned. As I type, my male is sat on a second clutch of eggs and the young from the first spawning are growing nicely. I hope to exhibit some of the youngsters at the Convention in the Breeders Award Programme display.



Male L114 sat on eggs

I have also raised a good number of one of my favourite Corydoradinae species, *Scleromystax* CW038. I recorded one of the first breeding reports in 2007 through the pages of the CSG Journal. Not many fish have been imported since, so I am pleased to help keep the species going in the hobby.



Adult male CW038

Articles this quarter include a report from Michael Hardman on his experiences with other members of the *Scleromystax* genus with some fantastic images of the 'bearded cory' or *S. barbatus*. I have written up my experiences keeping a number of different species of *Hypancistrus* and reports on the Autumn auction and a Yorkshire club trip to some Lancashire fish shops.

There are also more details on the forthcoming CSG Convention, if you haven't booked your tickets don't delay!

Mark



From the Chair



A new year, a new beginning...may I begin by wishing all members and their families a very Happy New Year? My first duty as the new chairman is to extend my heartfelt thanks to Danny Blundell, who so capably took over the reins midway through the previous year.

For those of you I have not yet met, this may be an appropriate moment to introduce myself. My name is Bob Barnes; I have been keeping fish for nearly forty years, with my specialization being Cichlids. I am Honorary President of the North-West Cichlid Group and Chair of the Greater Manchester Cichlid Society. I am passionately looking forward to the coming year and hope to meet as many members as possible during my term of office.

With this issue of 'The Catfish Study Group's Journal', the first auction and convention are rapidly approaching. This year's convention will be the 35th, our fourth time at the Kilhey Court Hotel. The line-up of speakers gathered by Ian this year, six in all, promises to make it an occasion to remember. Five of the speakers I have not had personal experience of hearing, but am looking forward with eager anticipation to their most welcome contributions. CSG's old friend Hans-Georg Evers, the 'Indiana Jones' of the catfish world, returns once more to regale us with tales of his latest derring-do.

On a final note, with the EGM and AGM now concluded, there still remain several key committee posts to fill. These are namely: Secretary, Publicity Officer and Merchandising Officer. If any member would like to assist in filling one of these vital roles, please feel free to approach either myself or any committee member.

With warmest regards,

Bob Barnes
Chairman, CSG

Catfish Study Group 35th Annual Convention

 <p>The Venue The Kilhey Court Hotel Chorley Road, Standish, Wigan, Lanc's WN1 2XN. United Kingdom</p>		<p>The Speakers</p>  <p>Hans-Georg Evers Barbie Fiorentino Brian Perkins Haakon Haagensen Mark Duffill Allan James</p>
<p>14th-15th-16th March 2014</p> <p>Contact conventionmanager@catfishstudygroup.org for full details</p>		

You did it!

Julian Dignall, PlanetXingu/PlanetCatfish.com



Marc Sabaj Perez

About this time a year ago, I began thinking about doing something tangible to support researchers at the Rio Xingu in Brazil. Much has been written about the plight of the river's endemic and migratory species that are immediately imperiled by the construction of the Belo Monte hydroelectric dam. However, it occurred to me at least, that there were many individual conservation projects going on and indeed fishkeepers and scientists were not joining forces in their respective efforts.



Oligancistrus sp L020



Panaque cf *armbrusteri* xingu

In short, the aim was to raise \$11,000 to buy equipment for studying Brazil's Rio Xingu before, during, and after the dam is built and operational. I set out to run this between April and December 2013. This took a bit of research in terms of reaching out more to the scientific community, researching an online crowd funding provider (crowd funding is essentially a collective effort of individuals, who network and pool their money, usually via the Internet to support a common goal), and organizing explanatory documentation, so the project was officially launched in early June.

These thoughts condensed into a plan and by March, I had some inkling of what to do to both assist the researchers in the field and those keeping and breeding these animals in captivity. At the Catfish Study Group's annual convention in Wigan, England, I announced the PlanetXingu initiative. Soon after that, I launched social media and website based campaigns to raise awareness of the project, its timescales and goals, and how people could get involved.

I am delighted to say that within the timescale set, the PlanetXingu project has raised the targeted \$11,000 and with just minutes to spare before the deadline passed. Everyone involved in the project is delighted and it just goes to show the extraordinarily direct and positive effect aquarists can have on research that is being carried out on the other side of the world. I genuinely did not know if this was possible, and I only hoped it would be possible... but now we know it is possible!



Hypancistrus sp L400

Nearly 200 contributors donated over the 32 weeks in 2013 and by midnight at the end of the 1st of January 2014, \$11,000 was reached. A few more donations have since arrived, meaning the total amount raised was \$11,452. The entire list of contributors is listed on the fundrazr website and PlanetCatfish.com. So many people got in touch and asked how they could help. AMAZONAS magazine and Practical Fishkeeping Magazine ran features on the project. AMAZONAS magazine provided magazine subscriptions for donations and PFK ran a large article on the project in lieu of a large donation. The Facebook group Pleco Sales & Swaps UK collected donations from members at one of their real-world meetings at Rare Aquatics, Crewe. Soon after, the North Wales Aquarists Society asked me to explain the project to them at a society meeting and also collected money for the project from club members. Both organizations then were treated to video from researchers on the shore of the Rio Xingu, name checking and thanking them for their efforts. The organizers of the premier L-number catfish event globally, "L-Number Days" in Hanover, Germany also asked me to present a talk on the project, which resulted in a swathe of donations in euros, pounds, and even Brazilian reals.

There are a lot of donors to the project, many remained anonymous but I would like to mention those that have donated. The biggest single donation came from Irwin Phua in Singapore, who started the ball rolling with a whopping 10% of the total project goal. I do not want to get into the sums donated, because it is relative to where people are in the world and their own circumstances, but that is worth mentioning! Nearly as large were the many donations made by delegates at the L-number event, including such luminaries as Hans-Georg Evers, Ingo Seidel, and many, many other European expert pleco breeders. Long-time PlanetCatfish contributor Andrew White, New Zealander Geoff Haglund, and Rob Graham (who created zebrapeco.com) are also amongst the top contributors. SwissTropicals also gave generously in addition to their other support to

the project. The Catfish Study Group (based in the UK) donated at a similar level. Also in the UK, several aquarists pulled together the Midlands Charity (fish) auction and PlanetXingu was a major beneficiary from the proceeds, placing that donation in the top 10.



Ancistrini sp L082

Andreas Tanke donated perhaps in favor of the less pretty plecocs of the Xingu alongside fellow German expert Elko Kinlechner. Allen Repashy (Repashy Superfoods), Rachael O'Leary (msjinkzd.com), Wet Spot Tropical Fish, Ross Evans, Regina Spotti, Rajanta Sinardja Rahardja at Bellenz Fish Farm, Mats Peterson, Ian Fuller at corydoraworld.com, Tom Halvorsen at The Pet Outlet, Rupert Collins, Dimitris Lysikatos, who organized the members of Greek fish website Aquazone.gr into a great amalgamated donation, and Rich Hevesi at CanadaPleco.com just show how international the support was that this project gratefully enjoyed.

Of note in the fundraising activities were two donors. Jostein Kristoffersen donated \$82 (amongst other donations from himself that made a big total) in honor of his beloved L082. I wish I had thought of asking people to donate a sum equal to the L-number of their favorite pleco! Also, Oliver Frank, OF Aquaristik, gave a donation every day there were other donations for quite some time and really helped keep the momentum up. Even researchers themselves and their family members donated, which was really supportive of the whole project. Let us not forget Texan Dave Rinaldo, who got us over the halfway point with his donation and was one of many donors, who found special ways or means to mark their contribution.

I cannot name check anonymous donors and there are many, many smaller but equally significant donations that without which we would not have got even close to this success. Thank you for every dollar. This has been a lot of work, a lot of fun, and, most of all, I am delighted that the global catfish community pulled together to support the research into the fishes of Brazil's Rio Xingu.

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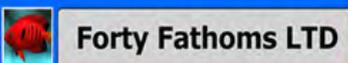
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Here's the rub: focus on *Scleromystax* catfishes

Michael Hardman

This king of the corydoradine world has striking features and fascinating behaviour that have kept it high on the list of must-have catfishes since it appeared in the hobby 40 years ago. In spite of its tolerance for cool temperatures, this species is one that many aquarists struggle to keep. This article will discuss the diversity of *Scleromystax*, their sexual dimorphism, reproductive biology and care in the aquarium.



In all his splendour, a mature and dominant male *S. barbatus* rivals the most coveted cichlid or stingray

As we make our way through life, certain things happen to us that are of such profound importance that they become instantly seared into our long term memories. I had one of those moments 20 years ago.

I was 15, minding my own business in the Aspull Civic Hall at the annual open show organised by the Catfish Association of Great Britain (Northern Area Group). I'm happy to report they are still going strong, and have shortened their name since then to The Catfish Study Group.

Anyway, I was minding my own business, waiting for the auction to start when I glanced over at some of the contestants neatly lined up on trestle tables. What I saw almost made me drop my pie.

Like most people in the hall that day, I had an eye for *Corydoras* catfishes. This was a cory, but three times the size, black with gold leaf, pectoral fins that went on for ever and the coolest sideburns since Elvis Presley.

This was the day I met *Scleromystax barbatus* – The Giant... Bearded... Cory. He (I later learned), took Best In Show and my total admiration home that day. I spent the next few weekends trying to find some, and then working several more to make the money to buy them.

I eventually brought home a young pair which I planned to breed and start to recoup some of my investment.

Life lessons

The male lasted two weeks and his widow two weeks more. Heartbroken and penniless, I learned a very important lesson about fishkeeping: *do your homework*.

I did my homework, and kept on doing it until the graduate college at the University of Illinois gave me a PhD in animal biology. I still hadn't worked out how to keep *Scleromystax* alive longer than six weeks, but I did know something about catfishes and their biology.



The male (left) *S. barbatus* is more ornately patterned when mature and has a moustache of skin teeth that he uses to rub his opponents the wrong way. The female (right) is more plainly coloured and resembles the subadult.



Subadult *S. barbatus* can be sexed at just over an inch, when the genital papilla begins to develop in males. The beautiful colouration, moustache and fins of males only develop later. In *S. macropterus*, all these changes occur at the same time but at a larger size. In other species, these differences are less pronounced and almost entirely absent in *S. salmacis*.



Subadult male *S. barbatus* can be sexed according to their genitals. The genital papilla between the pelvic fins develops when the male is just over an inch.



Mature and subadult female *S. barbatus* do not have the papillae.

When I started keeping fishes again several years ago, I made a private resolution to keep, raise and breed the Giant Bearded Cory. I'm very pleased to say I have done, and it wasn't nearly as hard as it seemed 20 years ago. Back in the day, we all knew the Giant Bearded Cory as *Corydoras barbatus*, but most of us that had some experience with it knew is

was quite different from others in this species-rich genus.

When he was my age, Albrecht (Albert) Günther (1830-1914) was an ichthyologist at the British Museum and he knew they were different too. In order to earmark their distinction, he created a subgenus called *Scleromystax* containing the (then) *Callichthys barbatus*.

Not *Corydoras*

Not many people paid much attention until 140 years later, when a young Brazilian ichthyologist was studying *Corydoras* and their relatives for his PhD. Marcelo Britto noticed that several of the skull bones in the Bearded Cory looked quite different to the same bones in *Corydoras*. In fact, they looked more similar to the bones in *Aspidoras*, so much so that Marcelo believed they are closely related and should not be confused with *Corydoras*, even by name.

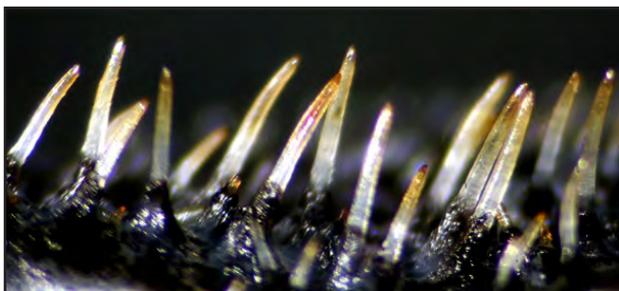
Thanks to people like Marcelo, the Giant Bearded Cory is now recognized for the marvellous and distinguished beauty it is and, since 2003, has been known by the more deserving title of *Scleromystax barbatus*.

I think Günther would be pleased his subgenus has finally seen the light of day. Along with *S. barbatus*, the genus contains four other formally named species (*S. lacerdai*, *S. macropterus*, *S. prionotus* and *S. salmacis*), two or three unnamed species (C113, Cw038 and Cw042) and *S. kronei*, currently a synonym of *S. barbatus* but which UK catfish gurus believe to be distinct.

All have a snout made of long narrow bones and have patches of small teeth (odontodes) on their cheeks. Adult males of *S. barbatus* and *S. macropterus* also develop long flowing pectoral and dorsal fins and the cheek odontodes become more flushed, especially in the former.



Specialized skin teeth (*odontodes*) develop on the cheeks of mature males and are used to show their quality as well as wrestle for the right to reproduce.



Close up of odontodes

Natural range and habitat

Scleromystax has a small and very special distribution in the small coastal streams that drain into the Atlantic Ocean of southeastern Brazil. This region, flanked in the west by the Serra do Mar, sits on what's left of some mountain chains that were formed around 600 million years ago. Almost all of the fishes that live here are found nowhere else and many of them are quite primitive. You could think of this region as something of a Lost World, and its unfortunately under great threat due to urban expansion and pollution.

Most of the streams that drain the area are relatively small, flowing swiftly with clean water that are sometimes stained with tannins. Some species occur together, e.g., *S. barbatus* and *S. macropterus*, but they are usually found separately. We know a little bit about the ecology of these systems and they appear to be rather stable throughout the year. Although there is a seasonal spike in rainfall between January and March, the pH remains around 6.1–6.3, conductivity 19–24 μS (soft), and the annual temperature ranges from 22 (July, dry season) to 28 (January, wet season) °C.

Upland sections are filled with rocks and boulders, with gravel and sand predominating through the middle stretches before sediments make up most of the streambed closer to the mouth. These shady streams receive an annual rainfall of 2–2.5m (7–9 ft), which is about 3 times what Manchester gets. So you could say it's wet. Stream flow, depending on the rain, varies from 0.2–0.5 m (1–2 ft) per second.

Ecologists have studied *S. barbatus* in these streams and found that they live in sandy areas of the middle and upper courses and feed mainly on detritus and bits of terrestrial insects or their aquatic larvae. Although it remains fairly constant throughout the year, their diet becomes more protein-rich during the wet season as more forest insects get washed into the stream.

Natural tankmates

They share their habitat with characins (e.g., *Mimagoniates*, *Astyanax*, *Characidium*),

hypopotopomatine suckermouths (e.g., *Schizolecis* and *Kronichthys*) and other catfishes such as *Rhamdia*, *Rineloricaria*, *Hypostomus*, *Trichomycterus*, and *Imparfinis*. Ambush predators such as the ubiquitous *Hoplias malabaricus* pose a deadly hazard, but otherwise their natural home is a peaceful and sparsely-populated utopia. Of the 7 or 8 species that we know about, *S. barbatus*, *S. lacerdai* and 2 or 3 undescribed species are quite often seen in European retailers. The others show up from time to time, but they have a very small range and are not targeted by aquarium fish collectors.

A lot of aquarists, myself included, have struggled to keep *Scleromystax* because they need well-oxygenated water of excellent quality. I think this might be the reason that many experienced aquarists recommend keeping them at lower temperatures. Cooler water holds more oxygen and, because their metabolism is related to temperature, the fishes that live in it use less so more is left over for the aerobic bacteria to process the toxic fish waste (ammonia).

Retail therapy

If you'd like to try them, resist the impulse to buy on sight. Given their sensitivity to poor water quality, they can suffer during shipping and unless the importer knows what they need, they can arrive at the dealer alive but die 2 weeks later. Thousands of *S. barbatus* meet their end this way.

So be patient, pay a deposit and reserve at least 6, and if they are bright eyed and bushy tailed (well, maybe not bushy tailed) a week or two later, take them home to a cycled aquarium of pH 6.5–7.0, 20–24 °C, 10–200 μS (0–6 dGH), with 1–2 cm layer of sand, scattered pebbles, pre-soaked branches and a few plants. Make sure whatever filter you use is mature and working well. The tank volume should be turned over at least 3 times an hour, and if you want to go the extra mile, add an airstone to make sure the water is saturated with oxygen.

They can be shy at first, but if you keep water quality high and disturbances to a minimum, they will start venturing out for chopped earthworms, frozen bloodworms and eventually switch to good quality flake or tablet food. If you get this far, keep up with your water changes (30–50% per week) using dechlorinated tap or rainwater and monitor the temperature and pH regularly.

Handbags and broken fins

Once settled and growing, *S. barbatus* begin to sort out who's in charge. Rival males use their beautiful fins and odontodes to establish a hierarchy prior to spawning. The dominant male is darker than all the

others, has both pectoral fins intact, a full 'tache, and defends a small territory against all other males.

a small territory against all other males. If a chancer comes looking for trouble, they both lift from the bottom, flex their barbels forward, lean towards each other and vibrate with their cheeks and pectoral fins touching. It's so cool to see them do it.



Male *S. barbatus* with broken pectoral fin

This behaviour lasts for a couple of seconds at most but, although I've never witnessed it, I suspect it can turn deadly. The *S. barbatus* I bought 3 years ago are now in their 3rd generation and on several occasions I've found young and healthy males unexpectedly dead in the aquarium.

More frequently, I find males with their pectoral fins snapped off and bloodied at the base. I generally keep *Scleromystax* in their own aquarium, so the damage is not attributable to an aggressive tankmate. They're nasty to each other.



He lives to fight another day, but this *S. barbatus* suffered a snapped pectoral fin while fighting a stronger male

If enough of your little gladiators make it through fight club, they usually begin spawning without much encouragement, but a partial water change or the addition of a powerhead can gee them up if needed. Females are drab, plump and without the fancy fins or cheek teeth. Males harass them, and each other, but the female usually mates with the dominant male in his territory.

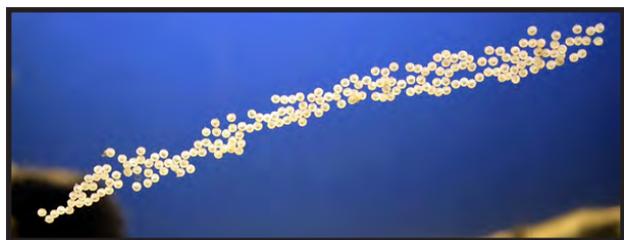
Spawning behaviour



Although typical spawning embraces are formed, *Scleromystax* have a different and intriguing spawning behaviour where non-spawning males will try to fertilize eggs that have already been placed like a cichlid. Egg plaques of 60–70 are typical, all of which are usually fertilized, perhaps because of the "sneaker" males.

Scleromystax spawn similar to other corydoradines; the male clamps the females' barbels against his flank with a pectoral fin while she drinks and pumps his sperm through her gut to mix with 2–6 eggs she lays into a basket made by holding her pelvic fins together. She will pause for a few moments before pressing them neatly in a pre-selected area of the aquarium, usually in the current.

I've seen non-spawning males attending to egg plaques as though they were a nervous cichlid, and placing their vent directly over them while quivering. It looks like he's trying to fertilize any eggs that the dominant males' sperm have missed (95% of eggs are fertilized in the pelvic fin basket, so 5 in every 100 need a paternal contribution).



Laid out in a neat strip, each female has a preferred spot where she places her eggs. Most other corydoradines place their eggs less deliberately over a much larger area.

After the females are spent, the eggs are left alone and I've found them to be 95–100% fertilized. Although the adults tend to ignore the eggs and they can be left to hatch in the spawning aquarium, usually transfer them to a breeding net where they can hatch and be fed without any undue stress.

Scleromystax eggs hatch in 4–5 days and rely on their yolk sacs for about the same. Start off with newly-hatched *Artemia* or micro-worm and wean them onto crushed flake food and chopped earthworm a few weeks later. They can grow quite quickly, so keep an eye on water quality and you should have no problems raising or finding them new homes.

***Scleromystax* Factfile**

Odontodes, or *skin teeth*, really are teeth. They have a pulp cavity, dentine and enamel. Loricarioid catfishes such as callichthyids, loricariids, trichomycterids and the less well-known astroblepids, nematogenyids and scoloplacids all have them and they are not found in other groups.

In addition to the primary sexual differences of testes and ovaries, the males and females of many insects, birds, reptiles, mammals and fishes differ in terms of size, colour, behaviour or morphology. Four of five *Scleromystax* species have secondary sexual dimorphisms. In most cases, species that have secondary sexual differences also exhibit a reproductive system in which one sex (usually the female) is choosy about who they mate with. Because of this, the chosen sex must advertise its quality and compete with rivals for access to the eggs or a nest.

Individuals that have brighter colours, broader shoulders, prettier songs, or longer fins and more densely packed odontodes win the mate and transfer their genes (coding for their desirable characteristics) to the next generation. This creates a positive feedback that eventually leads to sexes that look very different, and the differences are the means by which individuals are evaluated.

Sexual selection is a widely accepted explanation for why we see so many instances of sexual dimorphism in the animal world and fits what we see in *Scleromystax* quite nicely. Elaborate males use their long fins, body pattern and odontodes to intimidate or fight with rivals and establish their right of access to spawning females.

Females mate preferentially with particular males and may be choosing among them based on their colour, fin length, or facial teeth.

Dr. Marcelo Britto (Universidade do Porto Alegre, Brasil)

Dr. Britto has studied the morphology of callichthyid catfishes to reconstruct their evolution, correct their taxonomy, and understand their place in the big picture of Neotropical freshwater fishes

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Yorkshire Aquarist Club Road Trip

Mark Walters



Pier Aquatic's Amazon Room

Yorkshire has a strong tradition of aquatic clubs and membership today is still buoyant. Despite the general reduction in the number of people keeping fish – the hardcore keep going! Two clubs who maintain the momentum, with regular shows, auctions and other events got together on a cold Sunday morning in Sheffield to embark on a raid across the Pennines to some of the top aquatic retailers in the country.

Maidenhead Aquatics and The Abyss in Stockport. Plus numerous fast food outlets for essential carbohydrates!

A few of the species spotted included: *Microglanis cottoides*, *Corydoras undulatus*, *C. polystictus*, *C. ellisae*, *C. pantanalensis*, *C. diphyses*, *Ancistrus, sp.* *Missiones*, *Spatuloricaria sp.*, *Farlowella platyrhyncus*, *Sturisoma nigrorostrum*.



Aqualife



Pier Aquatics Coldwater Room



Maidenhead Aquatics

The trip started with Castleford Aquarist Society and Sheaf Valley Aquatic Society members congregating at the coach pick-up at 0745.



All aboard!



The Abyss

All above images by SVAS member Ben Nicholls

We returned home by 1800hrs, having visited Pier Aquatics in Wigan, Aqualife near Preston,

The images below by **Steven Grant**, show some of the fantastic fish on display, plenty made their way back to Yorkshire and in to members tanks. Thanks to all the members who took part and to the Sheaf Valley Aquarist Society for arranging the day.



Corydoras pantanalensis



Pterodoras granulosus



Callichthys callichthys



Lamontichthys llanero



Hypancistrus zebra



Trachelyopterus sp.



Spatuloricaria sp. 'caqueta'



Aphanotorulus sp. An unusual dwarf Loricariid



Cochlodon oculus



Hisonotus aky



Pimelodus ornatus



Corydoras ellisae



Corydoras guapore



Otocinclus arnoldi



Corydoras narcissus



Hoplosternum littorale



Corydoras cf C090



Ancistrus sp. Rio Paraguay



Lamontichthys filamentosa



Ancistrus sp cf Rio Ucayali



Spatuloricaria sp.



Unidentified *Corydoras cf vittatus*. Natural hybrid perhaps?

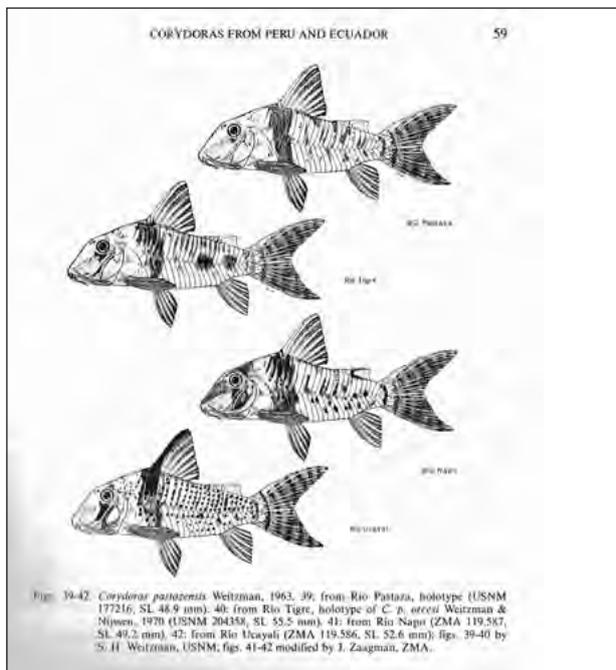
Presentation of Steve's images on facebook generated some lively discussions over the descriptions of various species. Although the Corydoras above couldn't be categorically identified, the two species below have received probably identifications. Michael Hardman posted copies of descriptions of the species to assist the determination.



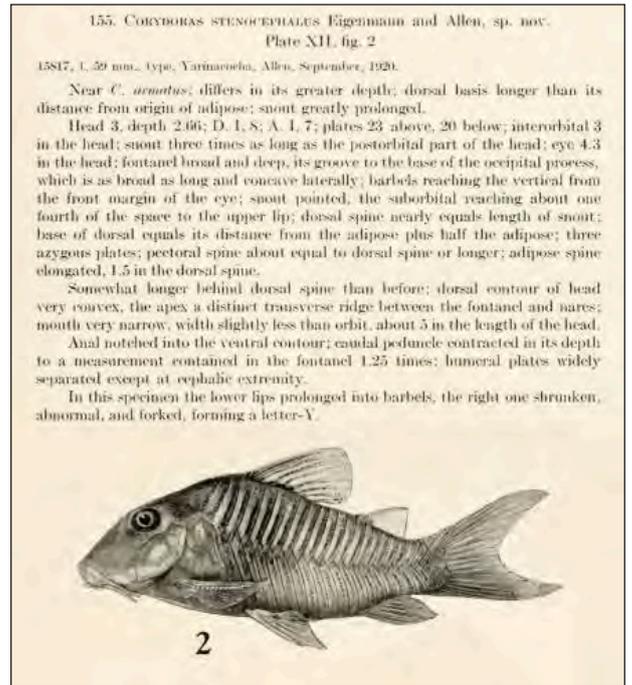
Lone specimen of *Corydoras orcesi*



Corydoras stenocephalus



Paper describing *Corydoras orcesi* and sympatric species



Paper describing *Corydoras stenocephalus*



Catfish Study Group Autumn Auction

Mark Walters



An unusual find at the CSG auction – Ancistrini species 'L127'

One of the final events in the fishkeeping calendar is the CSG November auction, providing a great opportunity to sell off your remaining tank bred fish and pick up plenty of bargains. There were over 15 lots booked in the packed auction in Darwen, Lancashire. Best prices went to pairs of 'super red' *Ancistrus* and *Sturisoma panamense*. Bargains included *Hypancistrus* 'queen arabesque' (L260) for £10 an mega clown plec (*Hypancistrus* sp L340) unsold at £5.

I picked up a mystery group of Loricariids, which looked like something between an *Ancistrus* and a *Peckoltia*. Some detective work on the web identified them as the Orinoco Plec L127, described as an unidentified 'Ancistrini' species.



L127 view of the mouth



L127 Top view

They have turned out to be very nice miniature plecs, a bargain at £4.50 each! I've included a few images below.

Other fish that went through the auction included:
 Corydoradinae: *longipinnis*, *habrosus*, *aeneus*, *sterbai*, *duplicareous*, *weitzmani*, *panda*, *paleatus*, *concolor*, *pygmaeus*, *loretoensis*, *sodalist*, *robbinia*, *barbatus*, *boesmani*, *gossei*, *carlae*, *metae*, *splendens*, CW023, C115, CW052, C125, C02
 Other catfish: L260, L340, *Ancistrus* colour varieties, L144, L181, L182, L211, L127, *Otocinclus* sp, *Sturisoma*, *Megalechis thoracatum*, *Bunocephalus* sp, *Mystus* sp, *Centromochlus perugiae*.

Convention Sponsors

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



An Introduction to *Hypancistrus* (Isbrücker & Nijssen 1991)

Mark Walters



Hypancistrus species 'L400'

It might sound a bold statement, but one genus of Loricariid catfish has contributed more than any other to the popularity of catfish in the past 30 years. Distilled further, one species in particular has been responsible for this interest and continues to be one of the most desirable in the hobby, despite a consistently high price and controversy over its conservation status.

The 'discovery' of numerous brightly coloured and strikingly patterned small suckermouth catfish in the late 1980's and early 1990's caused a minor tremor in the aquatic hobby and resulted in an informal method of classification we now know as the 'L and LDA numbering system'. Introduced by the German magazine DATZ, over 50 species were assigned codes in the first few years from 1988 to 1990. We have now reached L464, with undoubtedly many more species to be introduced to the hobby before formal description.

When one striped suckermouth catfish was introduced, many hobbyists started to pay some serious attention to catfish, and the frenzied collecting of L-numbers. The zebra plec received the code L046, which soon became its more popular common name. Even twenty years after formal description it is still known as L046 and shows no sign of becoming any less popular. It is a species which introduces more people to the catfish hobby than any other and often triggers an impulse to keep many more L-numbered catfish species. It is true that many of the Loricariid catfish deserve more care than most inexperienced aquarists can offer.

I recall working at an aquatic retail outlet in the late 1980's, seeing my first zebra plec in the flesh, a tiny striped catfish with a hefty price tag. Back then, fish keepers didn't understand the basic requirements for

keeping these fish and would offer them a standard community aquarium and plenty of vegetable food.

Descriptions of these species from aquatic literature of the time, incorrectly assumed *Hypancistrus* should be treated in much the same way as the common bristlenose catfish (*Ancistrus* sp.3). By studying their habitat in the wild, we now know they prefer higher temperatures to most aquarium fish, with clear well oxygenated flowing water.

Zebra plecs, and indeed all *Hypancistrus* species, have a dentition suited to a more omnivorous diet in the wild – preferring insect larvae, snails and other aquatic invertebrates. In captivity, we can substitute these live foods with higher-protein dried foods, frozen insect larvae and even marine shellfish meat like clams, shrimps and mussels. It is still worth offering the occasional round of vegetable food including courgette (zucchini), peas and beans. Young fish, especially, seem to need more vegetable matter in their diet.

Although they will tolerate normal tropical conditions, *Hypancistrus zebra* (Isbrucker & Nijssen, 1991), as it is now formally known, prefers temperatures in the region of 28-30 Celsius, this is true for other Rio Xingu species. The hobbyist will need to study the individual requirements of other *Hypancistrus* species to determine their preferred habitats, considering the wide distribution of the genus across the Amazon basin. Soon after aquarists realised some of the basic requirements to keep *H. zebra*, reports of their breeding were published.

International interest in the species led to more collecting and discovery of more species. The Brazilian government responded with an assessment on the exploitation of Loricariids for the aquatic

hobby and placed some restrictions on their export. In 2004, *H. zebra* was banned from export. However, this didn't prevent many specimens continuing to be collected and exported, either as different species or through other export routes (via neighbouring countries).

To this day, the export ban has remained in place, although 'wild caught' zebra plecs are still offered for sale and continue to be the main source of *H. zebra* offered in retail outlets.

The tide is turning however, and more and more of the specimens offered for sale are captive bred, whether from local breeders or from commercial operations. It is reported that 'thousands' of *H. zebra* are now being produced every week in Indonesia in fish farms dedicated to the breeding of desirable catfish species. This is despite a relatively low fecundity, with only 12 to 16 eggs produced in each spawning.

So long as they remain popular and the price remains high (approx £100 for a captive bred fish) the benefit will outweigh production costs, providing hobbyists with a constant stream of fish and securing the species in the hobby. However, the fate of wild populations hangs in the balance, not only from illegal collection, but from the construction of hydro electric dams across the Rio Xingu, diverting flow away from prime habitats and increasing siltation in once pristine water courses. Only time will tell if *H. zebra* and many other endemic species remain in their wild habitat in the future.

***Hypancistrus* experiences**

I have kept six species over the years and had breeding success with five of those. In summary, they all have similar maintenance requirements and will breed readily if provided with the right food and conditions. This can be summarised by warm flowing water (28-30C with a power head or similar), caves of the correct dimension, more caves than males, plenty of proteinaceous food with occasional vegetable offerings. It is also important not to mix different species in the same tank. They have been known to freely hybridise and considering the similarity of some species could lead to confusion as the youngsters grow on. The following sections describe some the species I have kept and some basics on their care. I will provide more details on specific breeding successes in future articles.

***Hypancistrus* sp 'L136b'**

My interest in *Hypancistrus* arose in 2007. I had been working through the CSG Breeders Award Programme and had experienced success with Corydoradinae (*Corydoras*, *Aspidoras* and

Scleromystax), Loricariinae (*Farlowella*, *Sturisoma* and *Hemiloricaria*) and Loricariidae (*Ancistrus* sp3 and sp4). I was looking for a new challenge and was drawn to the colourful world of L numbers. At a CSG auction in November 2007, a number of fish were offered which I couldn't resist.



Hypancistrus sp 'L136b'

It is important at auction to do your homework, or at least come equipped with an ID book or two. The speed at which lots are offered and the bewildering naming of catfish via L, LDA, C or CW numbers means you either really need to know your stuff, or take the occasional chance.

You really don't want to get your L01's and L02's mixed up, it could be the difference between needing a 50 litre or 500 litre fish tank! On this occasion, the fish offered were L04 *Hypancistrus* (so called 'angelicus plec'), bred and raised by Danny Blundell, the CSG treasurer.



Hypancistrus 'L136b'

Although I wasn't familiar with the code, the fact they were *Hypancistrus* (a genus of small species) and locally bred meant they would serve as a good start in the world of L numbers. The 4 fish were given their own 20 gallon tank, a few caves, internal power filter and a heater set at 80F (unlike most of my other tanks in the space heated fish house). I wouldn't like to say I forgot about the fish, but considering they were relatively juvenile, I left them to their species tank without too much further attention.

I was surprised, therefore to discover a male guarding a clutch of eggs, almost two years after I purchased the fish, in September 2009.



L136b fry at 4 days

A few further spawnings, and subsequent raising of a number of youngsters, encouraged me to examine the species more closely and an opportunity to chat with Ingo Seidel at the CSG convention in 2010, provided a firm identification.



L136b at 3 weeks

A group of the species were displayed by Danny on the Breeders Award Programme and identified by Ingo as L136b. I was pleased with the confirmation of the species, considering a number of exchanges on web-based forums which suggested the species could be a hybrid, from any combination of *Hypancistrus* species!

Danny has distributed many more from his breeding groups and other hobbyists have been successful in raising and breeding this attractive species.

***Hypancistrus* L340 – ‘mega clown plec’**

After acquiring the group of L136b I picked up another 4 *Hypancistrus* specimens, at a bargain price for wild caught fish. These were young, but sexable L340, commonly known as the ‘mega clown plec’. Unfortunately they didn’t last long and a combination of too cool water, insufficient flow and newly imported stock led to their early demise. I didn’t even keep them long enough to record an image to share with you.

This experience, like many in fish keeping, led me to research the genus more carefully and provide more suitable conditions for future projects.

***Hypancistrus* L066 – ‘king tiger plec’**

In April 2008 I was visiting a local fish store in Leeds which had a few *Hypancistrus* sp L066, commonly known as the king tiger plec. I traded a few dozen home bred *Scleromystax* to bring home two specimens.



L066 tank

After a few weeks I added a third from the same source. The king tigers were large (approx 10 cm SL) wild caught fish, and I didn’t know what sex they were.



Group of L066

Considering the adult size of these wild caught specimens, I thought I had a pretty good chance of breeding them. After a year of no signs of success, I realised I had three males!



L066 male

It seems this is a common problem and males are more commonly offered in the trade.

The reasons for this could be many – males are more easily caught by hand due to their habit of living in caves, females have a more nomadic life.

Also, it is possible that some exporters or dealers, hold back females and then offer them at a premium, making the chance of finding females in your shop even less likely. I put the word out and was pleased to hear of another Yorkshire store which had a female L066, brought in by another customer.



L066 Female

It was immediately obvious that I had three males, considering the morphological differences between the sexes. Not only was the female more rotund and squat, but the head shapes were quite different between sexes.



L066 trapping

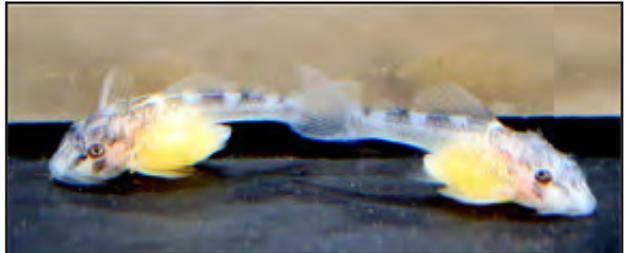
After a week, one of the males was seen trapping the female and was sat on a clutch of eggs a few days after that. The youngsters were easily raised and grew quickly.



L066 egg mass



Newly hatched L066



L066 fry at 4 days



L066 fry at 4 weeks

Over the next couple of years I had numerous spawnings and had distributed over a hundred young *Hypancistrus* back into the hobby.

This came to an abrupt end when the female jumped from the tank and was found close to death on the cover glass. I have not had further breeding success with the species, from F1's I have raised and the remaining adults, although I certainly haven't given up trying to get them to breed again.

Hypancistrus zebra

No article on *Hypancistrus* would be complete without some experiences of the most popular member of the genus. The type species of the genus, *H. zebra* was the first *Hypancistrus* I saw in my early fish keeping days (late 1980's), although it was out of my reach financially.

*H. zebra*

In 2008, however, a renowned fishkeeper and breeder from the North West provided me with an opportunity I couldn't resist. I had shared correspondence with David Howarth over a number of fishkeeping topics and he emailed me asking if I'd considered keeping *H. zebra*. He offered me a group at a good price, so I bundled the family into the car and headed West along the M62 motorway.

I picked up 5 specimens, from different bloodlines. David had at least 5 breeding pairs at the time, producing a good number of youngsters, he currently breeds a number of other *Hypancistrus* species and keeps his local specialist aquatic retailer well stocked in hard-to-get Hypan.

4 of the fish were F2's and about a year old and one larger fish (a male) was probably 18 months old.



Newly arrived zebras

They were housed in a 40 gallon species tank with plenty of flow and lots of cave choices. Like many Loricariid species, I didn't see much of them, except at feeding time before lights out, when there would be a bit more activity than usual.

After just 12 months, I noticed a male trapping a female and was surprised to see him fanning a clutch of eggs shortly after.

I say surprised, because I'd assumed they would take longer to mature. David was equally surprised how soon they had matured and expressed they were the first F2's he had heard of to be bred in the country.



Male brooding fry

The dozen young soon developed adult colouration and resembled miniatures of their adults within a few months.



Cave removed from tank and placed in a fry raising tub with through-flow

I found it hard to stimulate any further spawnings from the group and sold them on in 2012. As is often the case, I regret needing to sell them and when funds allow, plan to grow on another group of captive bred fish.

***Hypancistrus* L260 'queen arabesque'**

Another highly desirable species is the vermiculated queen arabesque. The CSG Convention is always a happy hunting ground for new species and many breeders exchange and sell rare species at bargain prices.

In 2012 Norwegian aquarist Erik Johansen offered some tank bred fish, in exchange at the convention. I secured 5 fish, which ranged in size from 20mm to 40mm, probably 3-6 months old.



Young L260

Again, I gave the fish their own 40 gallon tank, part of a 120 gallon circulating system with other *Hypancistrus* in their own tanks. After less than a year, I saw a wriggling baby outside a cave, still with its yolk sac attached.

On closer inspection I saw a male guarding its cave and a small batch of fry. The young were separated from the male and raised in a hatching tub with constant through-flow of tank water. They were offered tablet food and newly hatched *Artemia* nauplii. After 3 months they were large enough to sell on themselves. Subsequent to this first incident, the L260 have spawned a further two times.

***Hypancistrus* L400 'lower Rio Xingu plec'**



L400 youngster

One enduring positive aspect of the hobby is the constant support and assistance provided between aquarists. In 2012 I held onto a species of *Chaetostoma* catfish, as part of a South American import, for fellow CSG member and owner of Planet Catfish Julian Dignall. In an act of generosity, Jools gave me 5 young *Hypancistrus* he had been breeding from European stock.

There had been some debate about the identity of this species, with suggestions they might be L173 or even L236. As the fish have been distributed, it appears they are close to L400.

To cut a long story short, I maintained the group in their own 30 gallon tank and they grew steadily, up to adults of 100mmSL. Then I lost two through accidents, the first got stuck in a power filter inlet and the second was squashed between a couple of roof tiles, used to create caves in the tank. I'm sure I'm not the only aquarist who suffers occasional mishaps, and we mostly learn from our mistakes!

I hope I breed more fish than I lose and was very pleased to find a dozen youngsters turn up in the tank. I didn't witness a spawning, let alone a male brooding so was excited at the presence of babies. I left them to their own devices and they grew really well into juvenile fish.



L400, displayed at the 2013 CSG Open Show

I hope this insight has generated more interest in this group of fish, there are many more species available to the hobbyist than I have listed, all of which are suitable for home aquaria.

References

Evers, H.G. 2005. What's Happening in Brazil? Catchat – The Journal of the Catfish Study Group. Vol 6 No 4. Pp. 11 - 13

Isbrücker & Nijssen 1991. *Hypancistrus zebra*, a new genus and species of uniquely pigmented ancistrine loricariid fish from the Rio Xingú, Brazil (Pisces:Siluriformes: Loricariidae) . Ichthyological Exploration of Freshwaters, Vol. 1 No. 4 pp.345-350.

Seidel, I. 2008. L-Catfishes, Back to Nature.

Seidel, I. 2010. Pers comms, recorded in Catchat Vol 11 Issue 2. Pp. 18





14th 15th & 16th March 2014

BREEDERS AWARD PROGRAMME DISPLAY TANKS

As in previous Conventions, there will be **ten** B.A.P. tanks available for B.A.P. registered fish to be displayed along with details of the fish, maintenance and breeding conditions required. These tanks will be set up prior to the Convention, with heated, filtered HMA water, which may be replaced by the exhibitor. All tanks will be filtered by fully matured sponge filters. The fish may be sold from these tanks at the end of the Convention, the catching, bagging and sales are the exhibitors' responsibility.

There is no charge for these tanks, but it is the responsibility of the exhibitor to empty their tank at the end of the Convention.

Allocation of tank space is via Mark Walters, prior to the Convention, details can be found on the Catfish Study Group Web Site.

— oo00000oo —

SALE OF FISH AT THE CONVENTION

The CSG has purchased two 48x18x15h ins aquariums as per the B.A.P. Design, each divided into four separate tanks of approximately 12x15x12h ins. These will be set up prior to the Convention as the B.A.P. tanks.

Each tank may be hired for the weekend at a cost of £10.00 - priority will be given to residential delegates staying for the duration as there are only **eight** available. The vendors will be responsible for the selling, catching, and bagging of their fish.

Fish may be advertised free of charge on the Catfish Study Group's Website, or on Facebook.

It is the responsibility of the exhibitor to empty their tank at the end of the Convention.

Allocation of tank space is also via Mark Walters prior to the Convention.

www.catfishstudygroup.org

What's New?

Mark Walters

Insight into the natural habitat of *Scleromystax barbatus*

Habitat used by fish is often related with the requirements of the species, according to their morphological characteristics, feeding, and reproductive strategies. The authors describe the habitat preference, foraging behaviour, and camouflage strategy of *Scleromystax barbatus* (Callichthyidae: Corydoradinae), an endemic catfish from coastal streams in the Atlantic Forest.

The movement and foraging behaviour of 11 individuals were observed using focal-fish method, and the habitat structure availability (i.e., depth, bottom type, and mesohabitat) was measured in a clearwater stream stretch with 40 m length and 2.8 m width (± 1.5 sd) in southeastern Brazil. In addition, six individuals were captured to verify stomach contents.

Habitat selectivity of the species was assessed using the Ivlev electivity index that considers the frequency of occurrence of each habitat variable used by fish in relation to its environmental availability.

Scleromystax barbatus selected pools and runs with sandy bottom in depths between 21 cm and 40 cm, and avoided gravel in shallower riffles (up to 10 cm). Individuals foraged close to the bottom in a head-down posture, speculating and revolving the substrate composed by sand, fallen leaves, and twigs.



S. barbatus

Their long snout and small barbels were used to dislodge the food items of the substrate, which were quickly sucked by the mouth. Aquatic immature

insects (mainly trichopterans) were predominant in the stomach contents.

Three fish species, *Deuterodon iguape* Eigenmann, 1907, *Mimagoniates microlepis* Steindachner, 1877, and *Geophagus brasiliensis* (Quoy & Gaimard, 1824), were firstly registered following *S. barbatus* during its foraging activity.

The brilliant golden body colour with darkish spots of *S. barbatus* strongly resembles the stream bottom, which indicates disruptive camouflage.

For further details refer to the paper: Gonçalves, C & C Cestari. The use of an Atlantic Forest stream by the catfish *Scleromystax barbatus* (Quoy & Gaimard, 1824). *Neotropical Biology and Conservation* 8: 115–120, 2013.

Newly Described dwarf woodcat

Centromochlus comprises eleven described species, being the most problematic genus among the Centromochlinae. The *Centromochlus* species have a wide distributional area on northern South America. *Centromochlus meridionalis*, new species, is described from headwaters of rio Teles Pires, contributor of rio Tapajós, Mato Grosso State, Brazil, and represents one of the southernmost records of a centromochlin catfish for Meridional Amazon rivers.

Centromochlus meridionalis is promptly distinguished from its congeners by the small orbital diameter (relative to head length), and also by the combination of absence of first nuchal plate, anterior margin of dorsal-fin spine smooth, six branched rays in anal fin, seven pairs of ribs and 34 vertebrae.

They are small sized catfishes with adults between 33 to 61 mm in standard length. The modified male anal fin is conspicuous, with the third unbranched ray enlarged, about twice the width of first unbranched ray.

The new species inhabits a region strongly endangered by environmental changes due to expansion of agropecuary activities on Brazilian Amazon, which include this species in an uncertain situation regarding the conservation status of its natural population.

Full reference: Luisa Maria Sarmiento-Soares, Fernando G. Cabeceira, Lucélia Nobre Carvalho, Jansen Zuanon⁵ and Alberto Akama. *Centromochlus meridionalis*, a new catfish species from the southern Amazonian limits, Mato Grosso State, Brazil (Siluriformes: Auchenipteridae). *Neotropical Ichthyology*, 11(4):797-808, 2013

New *Parotocinclus* species

A new species of *Parotocinclus* is described from the upper rio Piranhas-Açu basin, northeastern Brazil.

The new species differs from all its congeners, except *P. bidentatus*, *P. muriaensis* (both from rio Paraíba do Sul basin, southeastern Brazil), and *P. spilurus* (rio Jaguaribe basin, northeastern Brazil) by presenting the adipose fin rudimentary or absent.

The new species differs from *P. bidentatus*, *P. muriaensis*, and *P. spilurus* mainly by presenting the abdomen region extensively naked, with few reduced rounded dermal platelets between the pectoral girdle and the anus. *Parotocinclus seridoensis* is probably an endemic species of the semi-arid Caatinga, region where the genus presents high species richness.

Full reference: Telton Pedro A. Ramos, Luciano F. Barros-Neto, Heraldo A. Britski and Sergio M. Q. Lima. *Parotocinclus seridoensis*, a new hypoptopomatine catfish (Siluriformes: Loricariidae) from the upper rio Piranhas-Açu basin, northeastern Brazil. *Neotropical Ichthyology*, 11(4):787-796, 2013

New dwarf Loricariinae

A new species of *Harttia*, tribe Harttiini, is described from tributaries of upper portions of rio Paraná drainage.

The new species, the smallest known species of the genus, attaining up to 74.0 mm of standard length, can be distinguished from its congeners by the combination of the following characters: abdomen completely covered by plates, a single preanal plate, plates of the gular area in broad contact with the canal plate. *Harttia absaberi* is the second species of the genus known from the upper portion of rio Paraná drainage.

Full reference: Osvaldo Takeshi Oyakawa, Ilana Fichberg and Francisco Langeani. *Harttia absaberi*, a new species of loricariid catfish (Siluriformes: Loricariidae: Loricariinae) from the upper rio Paraná basin, Brazil. *Neotropical Ichthyology*, 11(4):779-786, 2013

New Corydoradinae

Continuing the presentation of newly described CW numbered Corydoradinae we present a further 6 species from CorydorasWorld.com.

Scleromystax CW067

Locality: Coastal region of eastern Brazil, the exact location is unknown

Size: males 60.0 mm SL. females 65.0 mm SL.

Temperature: 20C



Scleromystax CW067 Image by Kim Kastberg,

pH: 6

GH: 6

KH: 1

Conductivity: 211

Substrate: Sand

Notes: This species is closely related to *S. lacerdai*. Bred under aquarium conditions.

Corydoras CW068



CW068 Image by Ingo Seidel

Locality: Rio Aripuanã (Brazil).

Size: males 55mm SL. females 60mm SL

Notes: This species was first collected three years ago by Jens Gottwald, they have since been successfully bred by Erik Schiller in Germany. *C. zygatus* from Peru is very similar in body colour.

Corydoras CW069



CW069 Image by Eric Bodrock

Locality: Imported with *Corydoras gosseii*

Size: Males 55.0 mm SL, females 60.0 mm SL.

Notes: *Corydoras* sp. CW069 turned up as a bi-catch in an import of *Corydoras gosseii*, the colour pattern is almost the same, but the body shape is closer, but slimmer, to *Corydoras seussi*.

Corydoras CW070



CW070 Image by Hernando Gil

Locality: Colombia, Caño Yi, Rio Vaupes system, at 30Km SW of Mitu city, Vaupes state,
Size: 65.0 mm SL males, 65.0 mm SL females
pH: 5.4
Substrate: Fine sand
Notes: This species was collected by Hernando Gil along with the similarly patterned, more prominent, short-snouted species CW071.

Corydoras CW071



CW071 Image by Hernando Gil

Locality: Colombia, Caño Yi, Rio Vaupes system, at 30Km SW of Mitu city, Vaupes state,
Size: males 60mm SL. females 65mm SL.
pH: 5.4
Substrate: Fine sand.

Notes: This species was collected by Hernando Gil along with the similarly patterned, less prominent, long-snouted species CW070

Corydoras CW072



CW072 Image by Ian Fuller

Locality: Peru, exact location unknown
Size: 60.0 mm SL males, 65.0 mm SL females
Notes: Similar species to C052, also from Peru., which lacks the fine body spotting and C100 a larger mre elongate species, also from Peru.
Introduced into the UK by Pier Aquatic.

Dedicated Catfish Websites



CSG Convention 2014

Ian Fuller Convention Manager

As I announced in the last issue, everything is in place in readiness for the groups annual convention, The event taking place on the 14th, 15th and 16th of March 2014 will be the groups 35th and getting better each year

Once again we have a strong international speaker line up that I am sure will keep us all well entertained over the whole event

- Hans-Georg Evers** - Hamburg, Germany
- Barbie Florentino** - Spokane, Washington, USA
- Brian Perkins** - Florida, USA
- Allan James** - Dunoon, Scotland
- Haaken Haagensen** - Bergen, Norway
- Mark Duffill** - Great Ayton, North Yorkshire, England

Our non Catfish speaker will be Mark Duffill talking on keeping and breeding Loaches. Mark was originally scheduled to talk at this years event, but unfortunately had to withdraw through ill health. Mark has now recovered hopefully should be fully fit and raring to go in March.

We will see the return of regular favourite Hans-Georg Evers, who never fails to enthral us with tales from his many collecting trips as well as giving us the benefit of his vast knowledge of all things Catfish.

Allan James from Dunoon in Scotland will be giving the events CSG member talk.

The furthest travelled speaker at the convention will be Barbie Florentino from Spokane, Washington state, USA. Barbie has been keeping and breeding L-number pleco's for a number of years and will be imparting some of the things she has learned over the years about these fascinating fish.

Not far behind Barbie in terms of travelling distance is Brian Perkins from Florida, USA, is owner of Wild Peru. The company not only collects fish for the aquarium trade, but also organises collecting trips for enthusiastic hobbyists. Brian will be talking about his experiences.

Last but by no means least on the list is Haaken Haagensen from Bergen on the West coast of Norway. Haaken is another Loricariidae enthusiast with a great passion for species conservation.

Below is a copy of the schedule of the weekends events.

looking forward to seeing many of you there.

Ian

Programme		Programme	
Friday		Sunday	
Informal Dinner	7.30 pm	Doors open	9.00 am
CSG presentation	9.00 pm	Programme starts	9.45 am
	Alan James	Talk 3	9.50am
	"How I Caught the Catfish Bug"		Introductions
	<i>Sponsored by Midland waterlife</i>		Mark Duffill
	---oOoOoOo---		"Loaches"
	Saturday		<i>Sponsored by the Barlows Aquatic Trading</i>
Doors open	9.00 am	Break	11.00 (15 min)
Programme start	9.30 am	Talk 4	11.15 am
CSG's Market place	9.45 am		Barbie Florentino
	Introductions		"Spawning Loricariidae"
	CSG RAP Stand		<i>Sponsored by Planet Catfish</i>
	BCA - BIA - ILA - BKA		
	Trade Stands	Lunch	12.15 (1 hour)
Lunch	12.00 (1 hour)	Talk 5	1.15 pm
Talk 1	1.00 pm		Peter Burgess
	Haaken Haagensen		"The Big Fish campaign"
	"Hypancistrus forms of the Rio Xingu"		<i>Sponsored by "Buster"</i>
	<i>Sponsored by Dave Howarth</i>	Talk 6	1.30 pm
Tea break	2.15 pm (30 min)		Brian Perkins
Talk 2	2.45 pm		"An Overview of the Fauna & Flora of Southern Peru and Northern Bolivia"
	Brian Perkins		<i>Sponsored by Corydorasworld.com</i>
	"Old friends and New"	Tea break	2.30 pm (15 min)
	Discovering the Corydoras of the Madre de Dios, Peru.	Talk 6	2.45 pm
	<i>Sponsored by Corydorasworld.com</i>		Hans-Georg Evers
Tea break	4.00 pm (15 min)		"The Brazilian shield"
Talk 3	4.15 pm		Land of waters, home of Plecos
	Catfish Forum		<i>Sponsored by Pier Aquatics</i>
	"Ask the Panel"		
	<i>Sponsored by South American Fish</i>	Presentations	4.00pm
6.15 pm	Close day one		---oOoOoOo---
Convention Dinner	7.30 pm for 8.00 pm		
After dinner presentation	9.30 pm		
	Hans-Georg Evers		
	"Big bony things" Armoured Catfish		
	of the genus Brochis and family Doradidae.		
	<i>Sponsored by Pier Aquatics</i>		



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Advanced Notice

On June 8th 2014

The Catfish Study Group will be holding another of our Summer Lectures & Sales Meets

This will be taking place at:

Derwent Hall, George Street, Darwen, BB3 0DQ.

Provisional speakers are:

Dr Martin Talyor from the University of East Anglia
Julian Dignall Owner of Planet Catfish

Further details will be published in the next issue of the 'Journal'

Hot Cory's

Ian Fuller

Hot Cory's! Yes, these are some of the most sought after species of the whole family, here I will look at three species that most certainly are at their best when kept at the higher end of the so-called tropical range.



C. adolfoi adult female

The first indication I had of *Corydoras* species tolerating, or even requiring higher temperatures, let alone it being a requirement for good health, and a necessity for breeding, was when a friend back in 1985 had started breeding *Corydoras adolfoi* Burgess, 1982. He had been keeping them at temperatures in the upper twenties Celsius when they first spawned. It was not until 1994 when I first started to breed them myself, and although it was not at such a high temperature. I had been keeping a group of six fish at around 25 to 27°C (77°F- 80°F). It was after the influx of cool water following a fifty percent water change, which triggered the spawning activity. The temperature was taken again at the time shortly after spawning activity had ended and was recorded at 24.5°C (76°F). It is also possible that *Corydoras duplicareus*, a species that is almost identical in appearance to *C. adolfoi* also prefers warmer water, they are at times found inhabiting the same tributaries of the upper Rio Negro, Brazil.



C. gosseii adult female

The next two species *Corydoras gosseii* Nijssen, 1972 and *Corydoras seussi* Dinkelmeyer, 1996 are also found inhabiting the same areas in the Rio

Mamore system Brazil. The first is most definitely a lover of warm water, which if they are to be successfully bred needs to be kept at temperatures around 26.5°C (80°F) if not a little warmer. I first realised their needs for a warmer environment a couple of years ago when a tropical fish wholesaler friend of mine imported a large quantity of *C. gosseii*, half of which were put in tanks on the highest section of his fish room along with some large Discus. The following day I received a phone call from him to say that the "New" Cory's were spawning, then after pause he said "but the Discus are eating the egg just as fast as the catfish were laying them". I went over to his place as quickly as I could to see if I could get some pictures of the spawning activity, but by the time I got there it was just as though nothing had happened. I decided to buy a group and see if they would give a repeat performance. The first thing that struck me when I started to catch the fish was the fact that the water felt warm, very warm. When I checked it was 29°C (84°F), and had been warmed up in readiness for the arrival of the Discus. Apparently one of the boxes of *C. gosseii* had been put in the Discus prepared tank by mistake.



C. seussi adult male

It was a year so later, in May 1999 that my fish first spawned; they were housed in their own 36 litre tank, where the temperature was an average 25°C (77°F) The tank furnishings were; a ten millimetre layer of smooth grained sand, a small air driven box filter a large clump of Java moss and a piece of bog wood with a piece of Java fern attached. Because of the amount of Java moss in the tank affording the *C. gosseii* almost total privacy, the fact that they had spawned did not become evident until a twenty millimetre long youngster started to show itself. I then decided to move the adults to a tank at the warmest part of the fish house.

This tank was a little larger, holding twelve gallons of water and had an average temperature of 28°C (82°F) This tank was filtered using a three hundred

litre per hour internal power filter and only had four pieces of Java fern attached to pieces of bogwood for cover, making observing the *C. gosseii* far easier than when they were in the tank filled with Java moss. Two weeks after being moved to their new tank and the day following a regular weekly thirty percent cool water change, spawning activity could be observed. The replacement cool water reduced the tanks temperature by only 2 degrees C.

The two females deposited eggs on just about every conceivable surface; some were even placed on the filter's outlet spout. On this occasion all of the eggs that could be found were removed and placed into a small hatching container and raised using my standard procedures. *C. seussi* is a species with a very similar colour pattern to that of *C. gosseii*, the main visual difference being that *C. seussi* has a longer snout, slimmer body shape and the colour of the dorsal and pectoral fin spines are pinkish orange, *C. gosseii* have yellow orange fin spines. Both species are found in the Rio Mamore river system, from an area known as Est. Rondonia in Brazil. It's the fact that these two species live together in the same habitat, at least during certain times of the year, which gives me the indication that at least during these times they are living in water of the same temperature and conditions. It may very well be that when the rainy season starts, both species migrate to totally different areas to spawn in their own chosen niches, only to meet up again as the waters recede.

This is only conjecture on my part but it will be a good place to start from when I decide to set up conditions in an attempt to spawn these fish.

Corydoras sterbai Knaack, 1962. is one of the more colorful of the family and a species that has become one of the most popular. It is also one of the easiest to breed.



Corydoras sterbai adult male

Because of its love of warmer conditions and is commonly available, this species has become very popular with Discus keepers, used mainly as a bottom dweller to clean up of uneaten Discus food. Personally I feel that keeping a fish as a house cleaner for an inferior species is wrong, but then again I am a Cory "Nut".

Send in your Articles!

If you've ever thought you had something to say about your fishkeeping experiences, or an achievement you were proud of, or some research you've done on a fish-shop find, share it with the rest of the Catfish Study Group through the pages of Catchat.

Any information or experience you have could be of real value to another aquarist looking for the correct food, spawning trigger or conditions to suit a certain species. It doesn't matter if you don't have good images to share; we have an extensive catalogue of photos at our disposal to illustrate an article.

Breeding reports are especially interesting and can be supported by photos of mating behaviour, egg deposition, egg development, fry growth – in addition to the wealth of information you could share on maintaining the breeding fish, spawning triggers, feeding regimes and the tricky stages of egg hatching and raising youngsters.

Sharing information will raise your profile in the catfish community and encourage more people to share their experiences and help you further with your efforts. In addition, you can use the material to support a Breeders Award Programme submission and enter into the annual award for the best breeding report published in the journal.

You will see from the range of articles routinely published there is a wide breadth of subjects to base an article around including: Breeding reports; Meet the member articles; New discoveries; Product reviews; Book reviews; Equipment articles, Fish house construction; Show reports; Fish-shop finds; Expedition write-ups; or for that matter, anything relating to furthering the study of catfish. Send your submissions to the editor@catfishstudygroup.org and enjoy the reward of seeing your efforts featured in future editions.

Seeing the light

Ian Fuller

Over the years fish tank lighting has gone through many changes, from tungsten filament bulbs, which for me actually proved very good for growing plants. The only problems that they gave me, were that they get very hot and can raise the tank temperature, but more alarmingly, was when a cover glass was left open and a fish splashed water onto the bulb causing a minor explosion as the bulb burst.

Following Tungsten came fluorescent lighting, these came in tubular form ranging in length from just a few inches up to several feet. The original fluorescent tubes were around 1-1/4" in diameter and were limited in the light output, 'Warm-white' and 'Day-light' the most common and over the years they have also gone through several design changes, with many specialist light spectrums being developed especially for the aquarium trade. There have been many dedicated light spectrum ranges developed, including fish colour enhancing, plant growth and ultra specialist Marine lighting. They have also gradually become more and more economical with the changes in diameter came a lower wattage, down from the inch and a quarter, a four foot would use 75 watts, the same in T8 at one inch came down to 60 watts and now we have T5's which measure a mere half inch in diameter and one the same four foot length uses just 54 watts.



The Fish House with just the two roof twin T5 units consuming a total of 216 watts.

In more recent times we have been introduced to the LED (Light Emitting Diode), these are improving pretty much on a daily basis, with seemingly endless variants in strip length, colour output and brightness. The most impressive thing about this type of lighting is that they are seemingly timeless, potentially last for many many years, with guarantees of up to seventeen years, but even more importantly they have very low electricity consumption.

After looking into this type of lighting and weighing up all the adds, I decided with the potential saving in electricity cost it would be a good investment to change over to LED's in the fish house and set about sourcing the right lights to meet my needs. I started with three four foot and one two foot units fitted to the roof of the fish house replacing the twin T5 units. The overall light output was very similar; basically I could easily see what I was doing. I then changed the two bayonet eco bulbs for similar LED bulbs, only a minor saving here.

The final stage was to fit lengths of narrow flexible, self adhesive LED strips to the underside of the staging, on the two lower levels of tank racking, this illuminated the lower two levels of tanks on each side of the fish house very well at and a mere 24 watts per side. The main and eco type lights are set on timers so that the eco light come on at 9.30 am, then at 10.00 am the main roof lights come on and five minutes later the eco lights go off. Then in the evening at 9.30 p.m. the eco lights come on and fifteen minutes later the main lights go off, then at 10.30 pm the eco lights go off. The above tank LED strip lights are at the moment turned on and off manually, but I plan to modify the whole timer system shortly to incorporate the LED strips, making the whole system fully automatic.

The total power usage with Fluorescent units and eco bulbs was 232 watts, now with just LED lights the total is 98 watts on the timed system and 48 watts with the strips, a grand total of 146 watts. On top of this is the added saving of not having the need to replace the fluorescent tubes every couple of years.



The lower racks of the fish tanks illuminated with 24 watt LED strip strips



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