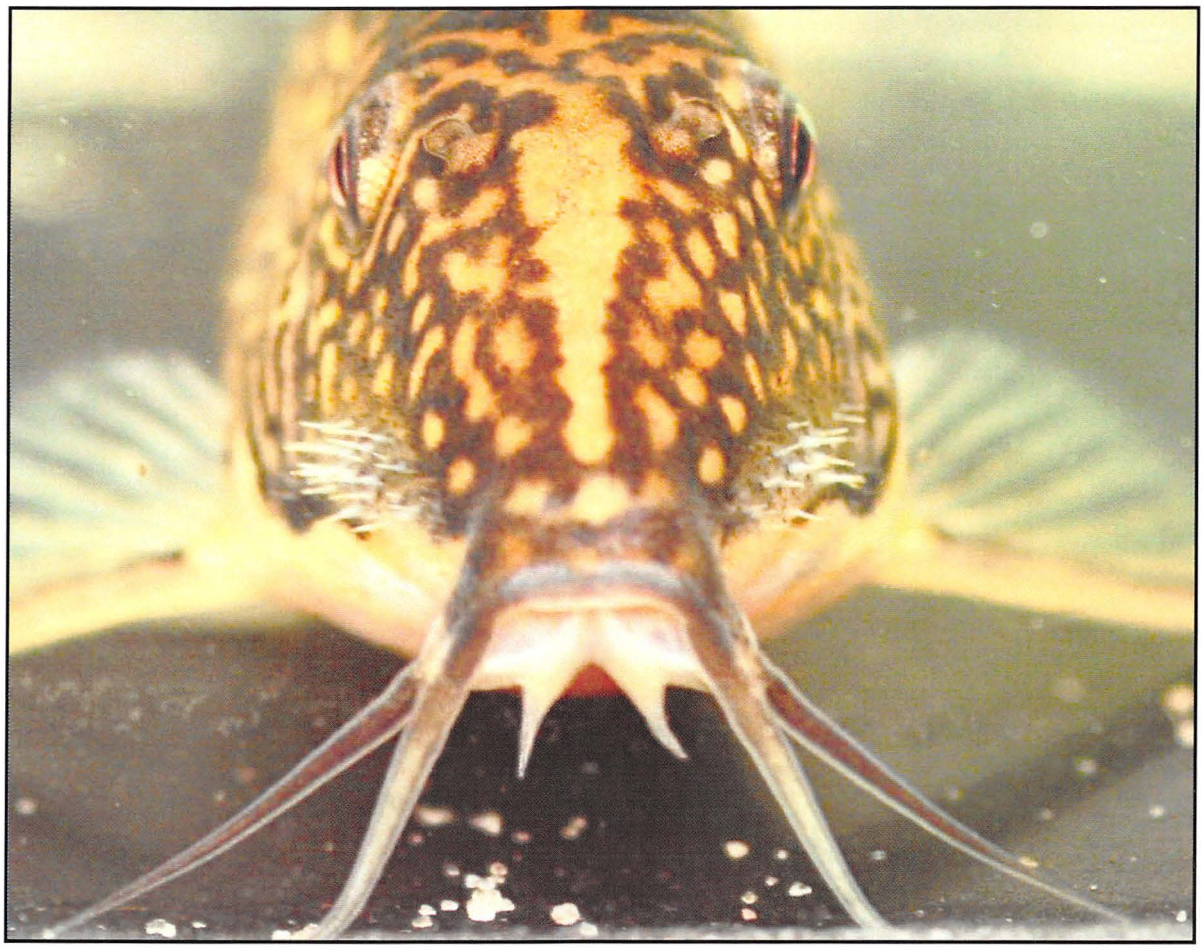
CatChat Volume 11, Issue 3. July 2010

CATCHAT
THE JOURNAL OF THE CATFISH STUDY GROUP



Scleromystax catfish

Fish Nutrition

Trachelyopterichthys

Spawning Aspidoras cf. rochai

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Diary Dates – 2010

Sep 19th	Open Show & Auction	35 Catfish classes Auction pre booking David Barton 01942 248130
Oct 17th	Topic - **Favourite catfish**	
Nov 21st	Autumn Auction	Pre booking David Barton 01942 248130
Dec 12th	Christmas meeting	Details to be announced

All meetings are normally held at the Highfields Working Men's Club, 1 Ratcliffe Street, Darwen, Lancashire, BB3 2BZ on the third Sunday of each Month from 1pm

Contents

Front cover – Headshot of a male *Scleromystax kronei*. See article on page 12
Image by Mark Walters

Publication of the Catfish Study Group Journal is proudly sponsored by Tetra

Editorial

Mark Walters

Thanks for the positive feedback for the last edition. I still plan to make plenty of improvements to the layout and image quality, so hope to bring even better copy in the future! A lot depends on members submitting articles so please have a go at writing about your pet subject.

As I write, I'm looking forward to the summer lecture and auction this August and promise a review in the October copy of the Journal. We should also be able to report on the September Open Show and Auction. If you haven't exhibited before, give it a try. The prizes on offer are well worth the effort and you may be surprised by the results of your favourite fish!

The latest edition of the Journal presents brand new articles on fish nutrition from convention regular Mike Hardman. Mike's original article was so comprehensive, I've divided it over two Journals. I've put pen to paper and started my series on Scleromystax catfish – a bit of a specialism of mine! This installment presents the genus and variety of species, future articles will concentrate on individual and groups of species.

Adrian Taylor is developing a reputation for his success with Aspidoras and presents his latest Breeders Award Programme article for *A. cf. rochai.* There are some great images to enjoy. We are also fortunate to be able to publish another great article by Yorkshire aquarist Steve Grant. As always, Steve's article is supported by stunning photos of rarely encountered species.

We have also distributed forms to book your tickets, room and meals for the 2011 convention. Convention Manager Ian Fuller has done a great job in securing a fantastic venue and most importantly A-list line up of speakers for next March. Rooms are limited so make sure you book early. Names include Dr. Michael Goulding, Dr. Ralph Britz, Devon Graham, Hans-Georg Evers, Rupert Bridges and membership secretary Bob Barnes.

Adrian also introduces his new role as the Breeders Award Programme Secretary, with an article encouraging members to submit reports. BAP provides a great mechanism to record your spawning successes and then collate as a report for publication. Just as importantly, promoting the breeding of catfish species will enable us all to keep rare species without impacting on wild populations and reducing the carbon footprint from the necessary freight.

News from Brazil increases the responsibility we have to breed and distribute our fish. In April, permission was granted to construct the Belo Monte dam on the Rio Xingu. The river is home to many endemic species including the iconic *Hypancistrus zebra* ('L046').

Generating 11,000 megawatts, Belo Monte is set to be the second biggest dam in Brazil and the third biggest in the world, behind the 14,000 megawatt capacity Itaipu dam in southern Brazil and the massive Three Gorges dam in China, which has a capacity of 18,000 megawatts

The $11billion scheme is now planned to start in 2011 and will inundate at least 500 square km of land, altering the hydrology of the river systems for ever. The area is the wild habitat of *H. zebra* and many other species. It is difficult to imagine how such species will survive for long.

Belo Monte will not be the last hydroelectric scheme on the Amazon and many more habitats will suffer a similar fate in the future. It is important that you maintain the valuable species you have and do your best to breed and distribute them to other fishkeepers, before they are lost forever.

Mark

Notice of Committee positions for election/re-election at the 2011 AGM to be held on January 16th 2011

Editor: Three-year term of office

Position presently being held by Mr M Walters after being appointed to that position by the CSG Committee in early 2010; The CSG Constitution requires that the Editor is elected; Therefore:

Nominee: Mr Mark Walters; Nomination made by Mr I. A. M. Fuller; Nomination supported by Mr A. W. Taylor.

Treasurer: Three-year term of office

Position presently held by Mr D Blundell

Mr D Blundell has shown willingness to continue in the said position.

Secretary: Three-year term of office

Position presently held by Mr A. W. Taylor

Mr A. W. Taylor has given notice that he no longer wishes to continue as the groups Secretary, although he will be staying on the committee in the lay position of Breeders Award Secretary.

Show Secretary: Three-year term of office

Position presently held by Mr B. Walsh.

Mr B. Walsh has shown willingness to continue in the said position.

Any member wishing to nominate a fellow member for any of the above positions; accompanied by another member who is willing to support the said nomination please do so in writing to:

Mr A. W. Taylor
CSG Secretary
103 The Uplands, Palacefields,
Runcorn, Cheshire
WA7 2UB

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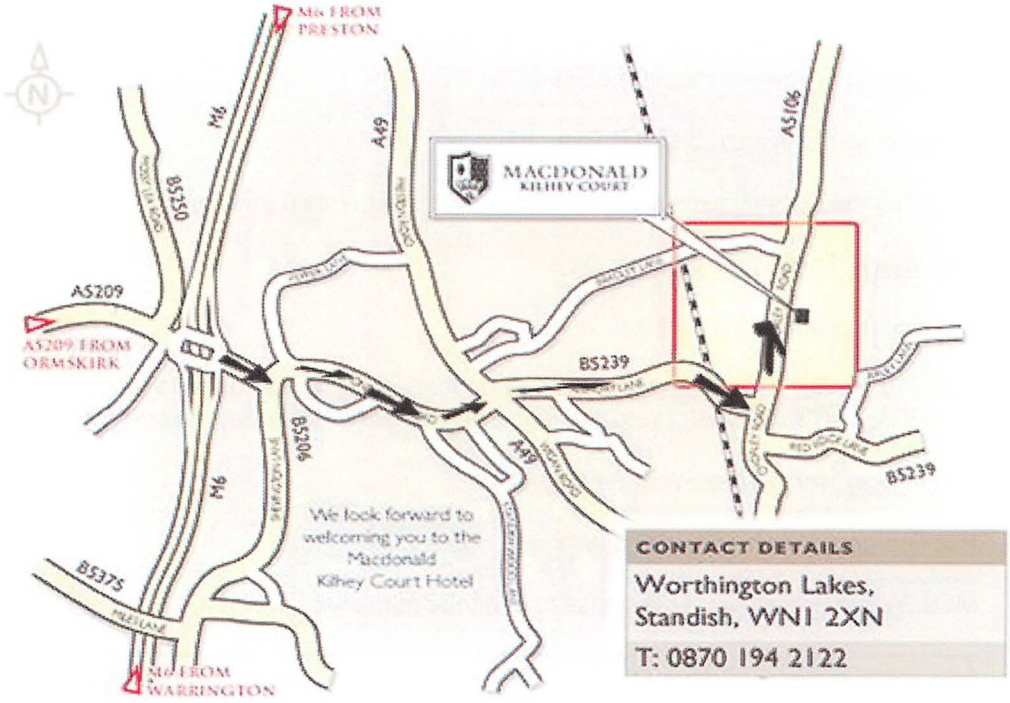
CSG Convention 2011

The date for the CSG's 2011 Convention has now been set for : - 18th - 19th - 20th March

The venue is totally new and should meet with everyone's approval, it is T**he Kilhey Court Hotel, Chorley Road, Standish, Wigan, Lanc's. WN1 2XN.** This is a superb four star hotel with enough room to cater for our every need. The conference room holds up to 300 people.

See map below and directions, or goto: http://www.catfishstudygroup.org/core/find_us.htm



Because this is a relatively small hotel with a total of 62 rooms, bookings will be on a first come first served basis and those that book their tickets early will get discount. Booking forms will be available as soon as everything has been settled and checked. Please check back to the CSG website for upcoming information. Or contact the Convention Manager – Ian Fuller.

Fish Nutrition – Part One
Michael Hardman

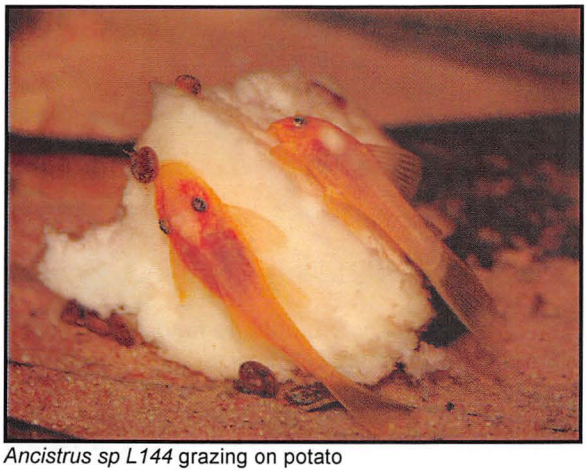
Mike Hardman has informed and entertained members of the Catfish Study Group at recent conventions and now presents a valuable two part series explaining the fundamentals of fish nutrition.

The next part (October 2010) will explain what you should keep in mind when designing the correct food for your catfish.

Many of us take fishkeeping seriously. We spend hundreds or even thousands of dollars providing an artificial environment that satisfies our fishes as well as our own tastes and ideals. For me, it's about giving fishes what they need so that they grow and reproduce normally.

I keep a lot of suckermouth catfishes and most members of this family (*Loricariidae*) scrape their food from fixed surfaces under a security blanket of night. Because none of my aquaria produce enough food (algae and associated organisms) to satisfy a dense population of suckermouths, I feed them.

Feeding suckermouths in community aquaria can be difficult as other fishes clear away the food long before they get to it. Adding food after lights out only kept the wood cats happy, and adding a surplus threatened water quality. We had a problem.



Ancistrus sp L144 grazing on potato

Mike delivering his 2010 CSG lecture

We needed a food that was nourishing, able to be attached to surfaces and did not dissolve in water. This was a tall order, especially for someone without formal training in food science or nutrition.

So, I started to learn about the first part of the problem: fish nutrition. This is the first of two articles that explain some of the things I've learned and tried and how this information might help those of you that have similar problems or want to try feeding foods other than those on the shelf.

Our knowledge of the nutritional needs of fishes is, understandably, based on the commercially important species (trout, salmon, channel catfish, carp and eel). While fishes have similar needs to us in terms of proteins, carbohydrates (starch and sugars), lipids (fats and oils), vitamins, minerals and trace elements, how much of each and how they are subsequently processed, used or stored is quite different.

PROTEINS

Protein is found in plants and animals as a structural or functional material and is necessary to repair damaged tissue, grow new tissue, and produce mucus, enzymes, hormones as well as eggs and sperm. Natural diets of fishes are protein rich and their physiology often reflects this.

But because natural food sources vary through the year, fishes have flexible physiologies that allow them to take advantage of opportunities when they come along, e.g., the seasonal emergence of mayflies and forest flooding. This is also why fishes in the aquarium can often be seen eating foods they would not encounter in the wild.

The amount of protein required decreases during the life cycle from 35-50% in fry to 20-35% as reproductive adults. Additionally, growth rate (and therefore protein requirement) is dependent on temperature.

So, as it gets warmer fishes need more protein in their diet whereas during the winter months they need less.

Protein is made up of many simple molecules called amino acids, of which there are 20 different kinds. Each protein is made up of a different sequence of amino acids, strung together like beads on a necklace.

The specific sequence and number of amino acids gives a protein its shape and function. When proteins are eaten, digestive enzymes in the stomach and gut break them down into their component amino acids that are then absorbed and used to build new proteins elsewhere in the body.

Sturisoma aureum – eating earthworm sticks, highly proteinaceous.

While half of the amino acids can be made, others have to be obtained by eating and digesting proteins that contain them.

These are the same 10 essential amino acids that we need and it means that certain foods must be included in the diet or as amino acid supplements.

As well as being a raw material for construction and repair, protein can also be used to make energy but only when a surplus exists or if too little of the main source of energy (carbohydrates and lipids) is provided.

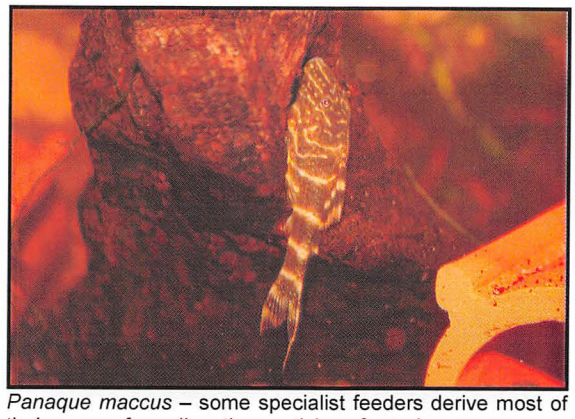
CARBOHYDRATES (STARCH AND SUGARS)

Because fishes are cold-blooded, they have a much lower energy requirement than us and other warm-blooded animals. Living in water also gives fishes the advantage of buoyancy: think about how it feels floating in the pool or when scuba diving.

Energy-rich foods contain a lot of starch of sugar, e.g., grains, root vegetables and fruits. These types of foods are typically absent in aquatic habitats and only partially digested by fishes when supplied in artificial diets, especially when they are complex (e.g., starch and table sugar).

Accordingly, most fishes (especially the predatory ones) are not specifically adapted to process and digest carbohydrate-rich foods; indeed, a diet containing more than 12% digestible carbohydrate can be lethal to trout!

Although fishes typically use fats and proteins to balance their energy budgets, carbohydrate remains a vital component of a balanced diet and, when fed appropriately, is known to enhance growth because the protein that would be converted to energy is instead ploughed into growth and repair.



Panaque maccus – some specialist feeders derive most of their energy from digesting particles of wood.

LIPIDS (FATS AND OILS)

Lipids are the main solution to long-term energy storage in animals. They come in two kinds: 1) *fats* that are solid at room temperature (e.g. pork fat), and 2) *oils* that are liquid (e.g. olive oil). Lipids must be in their liquid or soft form if

they are to be converted to energy. Fishes require and use both fats and oils.

Because humans and other warm-blooded animals typically remain above or near the melting temperature of many fats, we can eat, digest and use all fats and oils in our diet.

Fishes, being the same temperature as their environment, can only use fat if the water is warmer than the temperature at which the fat melts. If fishes are fed fat from a warm-blooded animal it is absorbed but remains hard and thus unable to be converted to energy.

Animal fat is usually stored in the liver where it can lead to health problems. This is why discus gurus recommend feeding only the leanest cuts of beef (e.g., trimmed heart muscle).

In addition to energy storage, lipids are involved in making cell membranes, nervous tissue (the brain and nerve cells), hormones and the storage and transport of substances that do not dissolve in water.

Similar to the sparing effect that carbohydrate has on protein, the energy provided by dietary lipid enhances growth by freeing up more protein for building rather than burning.

Like amino acids, some lipids (called fatty acids) are essential in the diet. So far, it seems that linolenic and linoleic fatty acids, found in seed and fish oils respectively, are essential to fishes and the best growth and food conversion rates have been seen in diets containing 1% of each.

VITAMINS, MINERALS AND TRACE ELEMENTS

Vitamins are biochemicals that maintain good health and promote growth. Most of them have to be eaten. I think that the vast majority of aquarium fishes are suffering from a vitamin deficiency of some kind: especially my suckermouth catfishes.

This is not a trivial point because prolonged vitamin deficiency can cause disease and death. My suspicion is based on three facts.

The first is that we know very little about the vitamin requirements of fishes other than those that are cultured commercially (trout, salmon, channel catfish, carp and eel).

The second is that diets of captive fishes must contain appropriate levels of each vitamin; too little will eventually lead to deficiency and too much can cause other problems, e.g., hypervitaminosis.

The third is that a diet containing the correct levels of each vitamin must be fed at an appropriate and regular rate to satisfy but not overload the demand.

Bear in mind that vitamins are used up and the requirements change as fishes grow, reproduce and eventually become old.

Fishes need the same minerals and trace elements as we do and they serve the same function as they do in us. Unlike us, fishes can absorb part or all of their minerals and trace elements from the water if they are present. Without consulting your water supplier, it's not safe to assume they are present, so they should be included in the diet.

Unlike vitamins, most minerals do not accumulate in the fish to dangerous levels even if a surplus is provided.

FIBRE AND EVACUATION SPEED

We know that fibre is an important part of our diet, but little is known about its importance in fishes. The vast majority of fishes cannot digest it, and it passes quickly through the gut taking most of the other food with it, some of which is only partially digested.

Par-boiled runner beans are a great food for suckermouths

This is important to fish farmers because it means wasted food (i.e., money) and to aquarists because it places an extra load on the biological or chemical filter, threatening water quality.

In the natural state, carnivorous fishes move their food slowly through the gut and digest 70-90% of it. Their digestive system is the most efficient and because of that, they feed infrequently.

Herbivorous fishes move food quickly (because of the extra fibre) and only digest 40-50% of it, requiring them to eat more frequently.

This explains why fishes that eat plants spend their time grazing and why most pike spend theirs loitering with intent.

Farlowella vittata youngster feeding on courgette.

In nature, fishes can choose when to feed. In the aquarium, you decide. Most flake food providers recommend feeding "little and often". Why?

Studies have shown that the speed at which food travels through the fish is directly related to the amount of food in the stomach. So, if you feed "little and often" the food spends longer in the gut and more of the nutrients are digested and absorbed. Less is more.

Travel time is also directly related to temperature, so it is especially important to frequently feed small amounts to discus and other warm water fishes when they are young and growing.

In the next part of this two-part series, I'll explain how I've applied the information in this article to design a food and feeding regime that seems to be working.

Although I designed it with suckermouths in mind, the cichlids, *Corydoras* and characins I also keep all seem to approve.

Food Facts

Proteins are required for growth, repair and reproduction. They can also be used to make energy.

Proteins are made up of 20 different kinds of amino acids, half of which must be included in the diet.

Fishes need both fats and oils in their diet, but feeding animal fat can lead to health problems.

Linolenic acid is an essential fatty acid for growth and good health.

While carbohydrates are rare in the aquatic environment, fishes can use them to make energy but only when they are simple and they must never exceed more than 20% of the diet.

Vitamins are essential to good health and must be included in the diet. Most aquarium fishes are probably suffering from some form of vitamin deficiency or overload.

Because they live in water, fishes can absorb most of the minerals and trace elements they need but only if they are present, otherwise they must be added to the water or food.

October 2010 – Part two: designing the correct food for our fish

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Breeding *Aspidoras cf. rochai.* Ihering, 1907

A W Taylor. F.N.A.S. Dip; MB.

It was in the autumn of 2009 when I received a few of these little catfish from my good friend Kim Mathiason, whilst away holidaying. Upon arriving home and finding that I did not have an empty aquarium into which I could hospitalise them, I hastily improvised a make shift hospital tank out of a 50mm long rectangular plastic container which had a tight fitting lid.

As most Aspidoras species, if not all, like to carry out impressions of Steve McQueen and the great escape when offered even the smallest of gaps to get through; and one can quite quickly end up with none left in the tank.

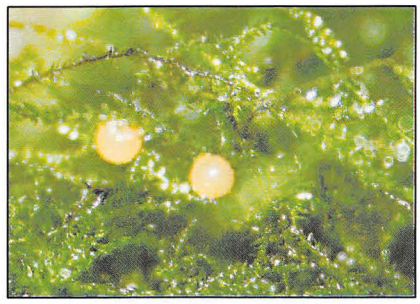
To the container I added some mature aquarium sand as a substrate and drilled a small hole in a corner of the container lid, through which I passed an air line and connected it to a small sponge filter, I then filled the container with a mix of mature tank water and rain water that had been left to stand in my fish house, I then set the filter to a medium rate of flow.

Once the temperature had equalized, and having made sure that the pH was similar, I released them into the container. Over the next few weeks they were fed upon a varied diet of commercial tablet, granular and flake foods and I added this set up to my normal water change routine.

It wasn't until the end of December that I moved them to a small Aquarium of their own. This Aquarium had a tight fitting lid and measured 400mm X 160mm X 160mm. The filtration was provided by an air powered Hamburg matten filter at one end of the tank.

The substrate was of sand having a covering of Java moss; the only other thing that was introduced to the tank was a nylon spawning-mop that was hung near to the surface of the water at the opposite end of the tank from the filter. The group consisted of two males and two females; with the males measuring 30mm SL and the females measuring 35mm SL and their diet was kept the same for the next few weeks.

Towards the end of February, I changed their diet to a catfish tablet in the morning and in the evening I fed them live grindal worms, I also increased the rate and frequency of water changes to 30% every other day.



Although after two weeks there were no apparent sign of spawning, I persevered and increased the amount of water changed to 50%. It was whilst I was sitting in my fish house early in the evening ten days later, that I observed the males chasing the females around the tank and at times offering their flanks to the females snouts; but although I sat patiently there, camera in hand for the next couple of hours there was no sign that the females were interested in mating; however, the following morning whilst I was opening up my fish house and was checking that everything was fine amongst my fish,

I noticed that there were eggs laid either singular or in pairs in amongst the Java moss, just above the substrate, although I did find three singular eggs in the spawning mop.

These eggs were removed from the Java moss and spawning mop and placed in a small plastic container of the type used in 'take away' foods and subsequently aerated. The eggs hatched some 12 hours later and were kept in the 'hatching tray' for the next three days, with 50% water changes being carried out each day.

On the fourth day the fry were moved to a external clip-on type fry tank which was attached to a 'growing on' tank that contained some Corydoras sp CW10 fry, where they were fed on a diet of crushed flake food in the morning and milli-worm in the evening for a week, after which I supplemented their diet with newly hatched brine shrimp.

After another 3 days the fry were of sufficient size to compete with the Corydoras Sp CW10's for food that it was possible to release them into the 'growing on' tank that house the CW010's. This 'growing on' tank received a 15% water change every other day.

It took another six weeks before they were of a size that meant that I could move them to a larger tank that contained a variety of small non-aggressive fish.

Fry @ 1 month.

Fry @ 2 month.

All images the property of A W Taylor

Scleromystax Catfish – Introducing the Genus

Mark Walters

***Scleromystax sp. CW038* dominant male**

Introduction

Scleromystax barbatus was the one fish I longed to keep when I started fishkeeping in the early 1980's. The 'bearded cory' (in the genus Corydoras at the time) had only recently been introduced to the hobby and the magazine articles and spawning reports encouraged me to one day breed these fish for myself.

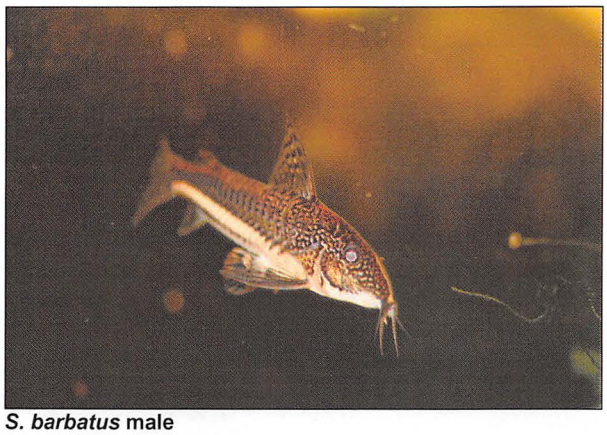
After many gaps in my hobby, I reacquainted myself with *S. barbatus* in 2000, when wild caught specimens were more commonly available, and affordable.

Like most fishkeepers I kept them in typical tropical conditions and was rewarded with a spawning before too long. However, only a few fry survived and the adult group dwindled to one female specimen. In 2005, a new fish house, and affiliation to the Catfish Study Group renewed my interest in Corydoradinae catfish and I sought to keep and breed more species.

I purchased a new male barbatus and before long had witnessed numerous spawns from my original female. She lived to around 12 years old and was the parent of literally thousands of F1 barbatus sold in the north of England in the last 5 years. I had also, by this time, researched the species and other species in the genus, to ascertain the correct conditions, realising the conditions they preferred.

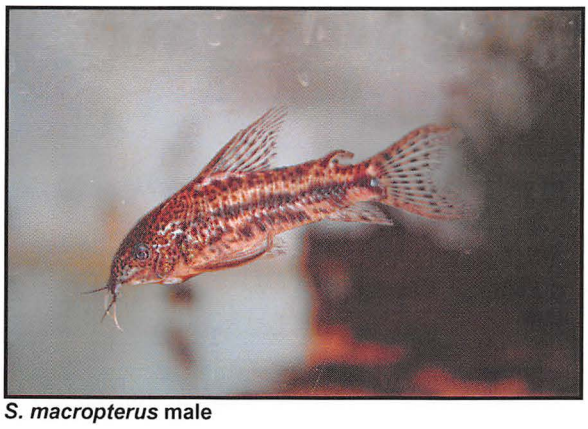
The CSG provided an opportunity to share in the knowledge of many experienced and renowned hobbyists and also provided a source of new Scleromystax species.

In addition to the *S. barbatus*, over the last 5 years I have been successful in collecting groups of *S. prionotus*, *S. kronei*, *S. lacerdai*, *S. macropterus*, C112, C113, CW038 and CW042. This article, for the first time, presents images of nine of the ten likely species, for comparison.



***S. barbatus* male**

Many of the tropical tanks in the fish house have made way for cooler tanks and my efforts have since been on breeding and rearing as many species of the genus as possible. I currently house eight species of Scleromystax and have spawned six.



***S. macropterus* male**

I am currently planning a web-based resource for Scleromystax enthusiasts. In the short term, however, the CSG Journal provides a great opportunity to share the knowledge I have gathered and I hope that members will be encouraged to try these catfish for themselves.

The genus

Scleromystax belong to the Corydoradinae, a sub-family of Callichthyid catfish which also includes the well known Corydoras, Aspidoras and Brochis.

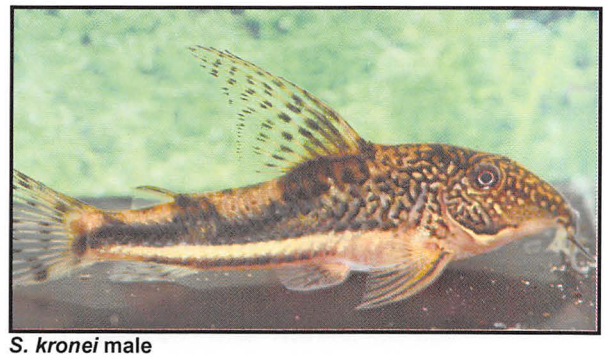
Gunther (1864), proposed all Callichthyid catfish in a single genus Callichthys, with subgenera of Corydoras, Callichthys and Scleromystax (at the time including only the species *Callichthys barbatus* Quoy and Gaimard, 1824).

Scleromystax was raised to genus level in 1888 by Eigenmann and Eigenmann. In 1940. however, Gosline synonimised Scleromystax with Corydoras.

In his paper of 2003, Britto revalidated Scleromystax as a genus and linked it with Aspidoras into the tribe Aspidoradini.

He assigned the species *barbatus* (identifying separate species from Rio de Janeiro and Sao Paulo), *prionotus*, *macropterus* and an unidentified species 'A' (referred to as 'baianinho II' - C112).

Isbrucker (in Fuller 2001), resurrected *Corydoras kronei* from synonymy with *barbatus* and both species are now in the genus Scleromystax.



***S. kronei* male**

Fuller and Evers (2005) included *lacerdai* as an obvious member of the genus. The lacerdai look-a-like 'C113' (although significantly larger) is also referred to as a member of Scleromystax in their comprehensive work 'Identifying Corydoradinae Catfish'. In the same year, a new species, *S. salmacis* was described as the most southerly occurring member of the genus.

More recent genetic studies (Alexandrou 2010) have proved that Scleromystax are more closely related to Aspidoras than Corydoras and are the most archaic of the Corydoradinae.

As the common name of *S. barbatus* suggests, the genus is distinct in the differences between the sexes and distinct odontodes (the 'beard') of mature males. Indeed, the name is derived from a combination of Greek and Latin – *Sclero* meaning hard and *mystax* meaning moustache.

Other defining features include elongated pectoral and dorsal rays, particularly in dominant males. However not all species exhibit these differences as clearly as some. Future species specific articles will show some of the variations.

Origins

One thing that all Scleromystax have in common is their origin. Unlike Corydoras, which are distributed from Trinidad in the North to Argentina in the South, Scleromystax are restricted to the SW corner of S. America. Mainly to be found in Brazil, but also possibly in bordering countries.

Specifically, the genus are typical of the area described as the Mata Atlantica, a strip of ancient coastal forest with many endemic species.

This unique habitat is now much reduced due to deforestation and human encroachment.

Many populations of fauna and flora are now restricted to 'islands' of habitat with a high risk of extinction.

As a consequence of this deterioration in habitat certain species including S. macropterus, are now protected from commercial exploitation and should not be exported for the aquatic hobby.

The Species

In total, I would suggest we have 10 distinct species - 6 described and a further 4 undescribed. In reality there are likely to be more species – with a number of 'lacerdai' and 'barbatus' types entering the hobby in recent years.

The current species list reads: *S. barbatus*, *S. kronei*, *S. lacerdai* (baianinho I), *S. macropterus*, *S. prionotus*, *S. salmacis*, S. sp. 'C112' (baianinho II), S. sp. 'C113' (baianinho III), S. sp. 'CW038' and S. sp. 'CW042'.

All of these species, with the exception of *macropterus* and *salmacis*, are currently available in the hobby with successful breeding of all but CW042.

There exist some quite distinct species such as *prionotus* and *macropterus* (although *salmacis* appears superficially similar), a group of *barbatus* type species (including *barbatus*, *kronei* and C112) and a group of *lacerdai* types (including *lacerdai* – C015, C113, CW038 and CW042).

In some literature, *S. lacerdai* is regarded as Corydoras and *S. kronei* as a synonym of *S. barbatus*.

The validity of species will be discussed in future species-specific articles.

***S. cf. lacerdai* male**

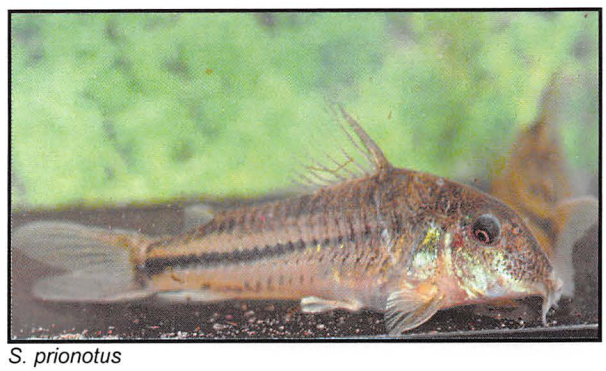
By means of explanation, for those species which have not been described, C and CW numbers have been introduced by eminent German and U.K. aquarists, as a means to identify species pending formal classification.

At the time of writing (August 2010) there are 158 C numbered and 51 CW numbered Corydoradinae catfish.

Husbandry

Detail of the conditions preferred by Scleromystax species will be the subject of individual species articles. In general terms, they enjoy cooler temperatures to their more equatorial corydoradinae counterparts. In reality we need to examine their origins more closely to offer them an ideal aquarium setting.

Some species (e.g. *S. prionotus, S. salmacis, S. kronei*) are more southerly (and cooler loving) than some of the more northerly tropical rainforest dwelling members of the genus. Some are found in acidic blackwaters (*S. macropterus*) and some in fast flowing white-water coastal drainages (*S. prionotus*).



S. prionotus

In an aquarium, general conditions of cool (62 – 75f), acidic (5 - 6.5pH) well filtered water with a moderate flow suit most species and with good feeding will encourage them to spawn quite readily.

Availability

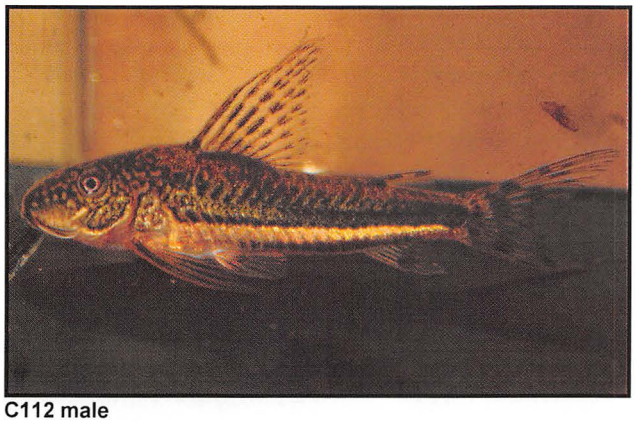
The species I have acquired over the last five years have come from a number of sources. *S. barbatus* used to be regularly imported from wild caught supplies.

In recent years, the number of aquatic retailers able to supply *S. barbatus* has reduced. I now know of only one U.K supplier of wild caught *barbatus* – Pier Aquatics in Wigan (NW England).

Similarly, Pier Aquatics have been the source of a number of 'impossible to get hold of' species over the last few years including *S. prionotus* (year of import - 2010), *S. kronei* (2008), CW038 (2006/07), CW042 (2008) and more recently what are believed to be true *S. lacerdai* (2010).

A second supplier, Britain's Aquatic Superstore (B.A.S.) in Bolton (also in NW England) has imported *S. prionotus* (2007), C113 (2006) and a dark form of *S. barbatus* (2007).

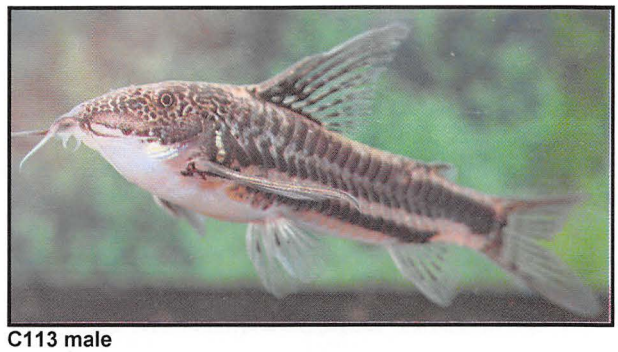
The Scleromystax species believed to be C112 originates from fish purchased from Aqualife in Leyland (again NW England), from a breeder in SW England in 2007.



C112 male

The recent breeding successes of CSG members including Lancashire (NW England) based Adrian Taylor (*S. prionotus*, C112), Paul Dixon (C113) and Alan Vassiere (*S. cf. lacerdai*) have ensured that these species remain available in the hobby – for the time being.

In addition I have distributed many CW038, *S. barbatus* and *S. kronei* and maintain populations of these and other breeding groups (C112, C113, *S. prionotus*).



C113 male

Of the remaining species, *S. macropterus* has not been reported as bred in captivity or seen in the U.K. for many years. I purchased a trio at a CSG auction in 2007 which had been kept by a CSG member since before the trade restrictions.

Unfortunately, the fish were quite old and it was not possible to breed them. *S. salmacis* has not been collected since its description in 2005. Although no live specimens have been seen, holotype images of *S. salmacis* can be viewed at CorydorasWorld.com.

S. lacerdai was bred successfully by Jim Makin (Scotland) in the late 1990's (and positively identified as true lacerdai by Hans-Georg Evers – pers comm.), although the populations died out in the hobby. Scotcat.com hosts breeding reports by Jim for a number of Scleromystax species.

The identity of the *S. lacerdai* currently available is questionable until the juvenile specimens imported by Pier Aquatics (March 2010) have reached maturity. Similarly the identity of the *S. cf. lacerdai* bred recently by Alan Vassiere is open to discussion. This could well be another Scleromystax species.

The species assigned as C015, could also be another variation of the true *S. lacerdai*.

CW042 was imported as *S. lacerdai* (and from the type locality) but developed into an altogether distinct fish.

Only a single pair were successfully imported (in 2008) and although they thrive I have not yet managed to breed them.

CW042 male

Globally, imports of CW038 were made in 2006. At first the fish were described as C113. It became apparent that these fish were not the same as those originally described as C113.

This impressive species sports exaggerated pectoral and dorsal extensions in the 'super-males' which grow in excess of 80mm standard body length.

Profile of male CW038 showing extended pectoral spines

S. macropterus was also available to U.S. fishkeepers in 2007, although the legality of those exports from Brazil is open to suggestion.

Headshot of male CW038, showing 'whiskers'

The next article in the series will concentrate on the *Scleromystax barbatus* group.

All images the property of Mark Walters

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Trachelyopterichthys Bleeker, 1862 (Siluriformes: Auchenipteridae)

Steven Grant

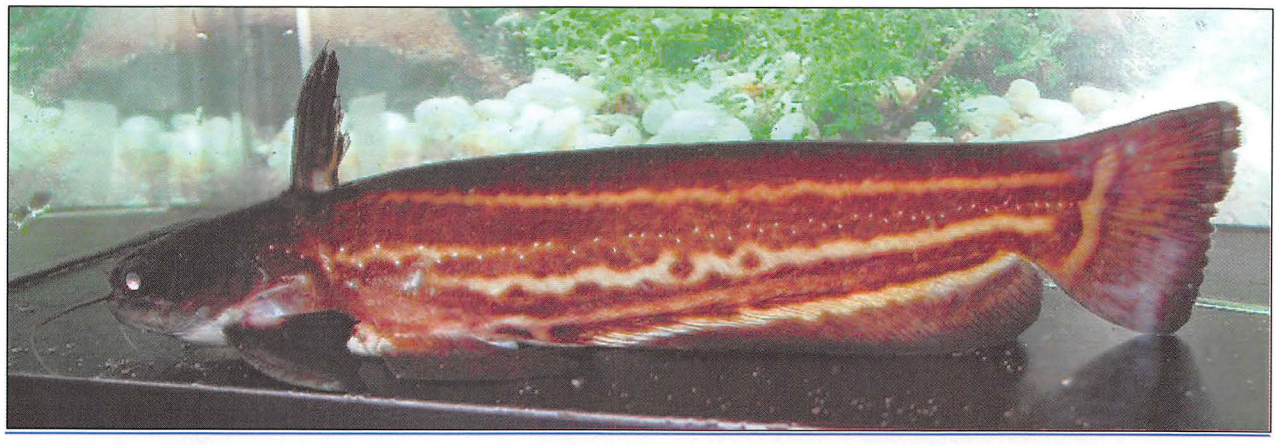
Woodcatfish, or auchenipterids, are one of my favourite catfish. Unlike some genera of auchenipterids, *Trachelyopterichthys* only (currently) has two species, which are easily told apart.

After an absence of some years from the hobby *T. taeniatus* has recently been available for sale. Thankfully for me, one such shipment had an extremely rarely catfish mixed in.....

The Species

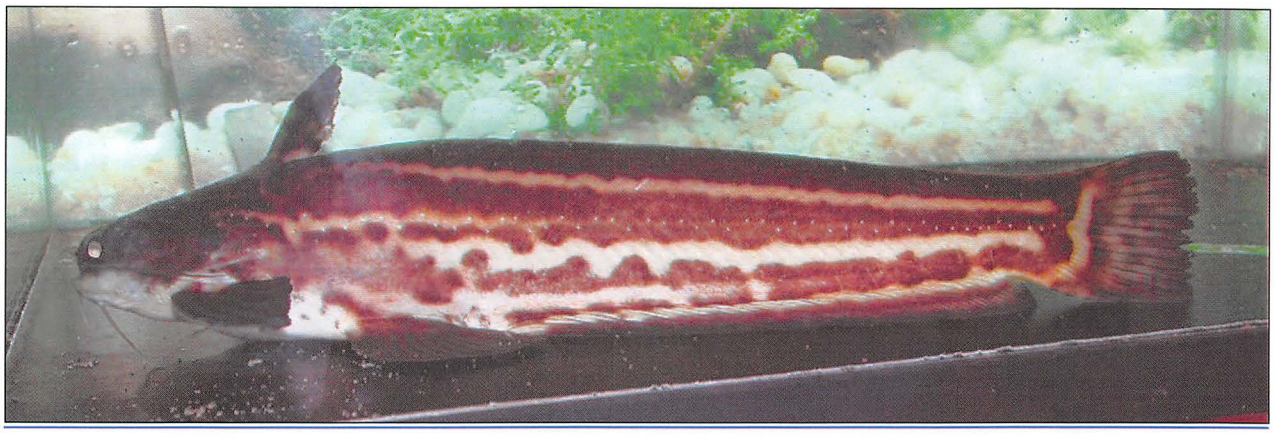
Trachelyopterichthys taeniatus (Kner, 1858)

Distribution: Amazon River basin: Brazil, Peru, and southern Columbia and Venezuela.



***T. taeniatus* - male**

This species get to around 14 cm SL. It is easily told apart from *T. anduzei* by its horizontal light and dark body stripes. Its colour can vary from light brown to very dark brown.



***T. taeniatus* - female**

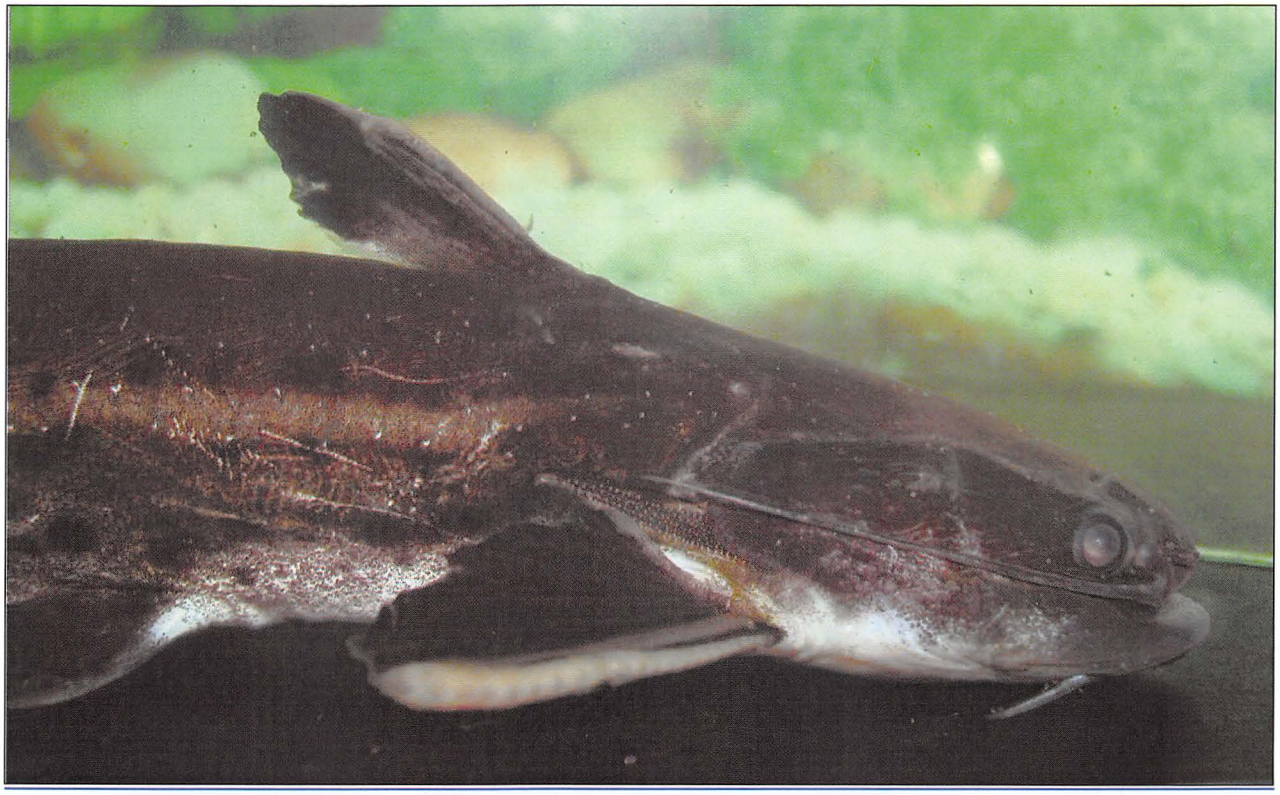
***Trachelyopterichthys anduzei* Ferraris & Fernandez, 1987**

Distribution: Upper Orinoco River basin, Venezuela.

***T. anduzei* - female**

This species was described on the basis of one (male) specimen, measuring 13.95 cm SL. My specimen is a female and measures around 17 cm SL.

This species is very rare in the hobby. It is easily told apart from *T. taeniatus* by it having spots on the body instead of stripes. Ferraris & Fernandez (1987) also provide morphological differences.

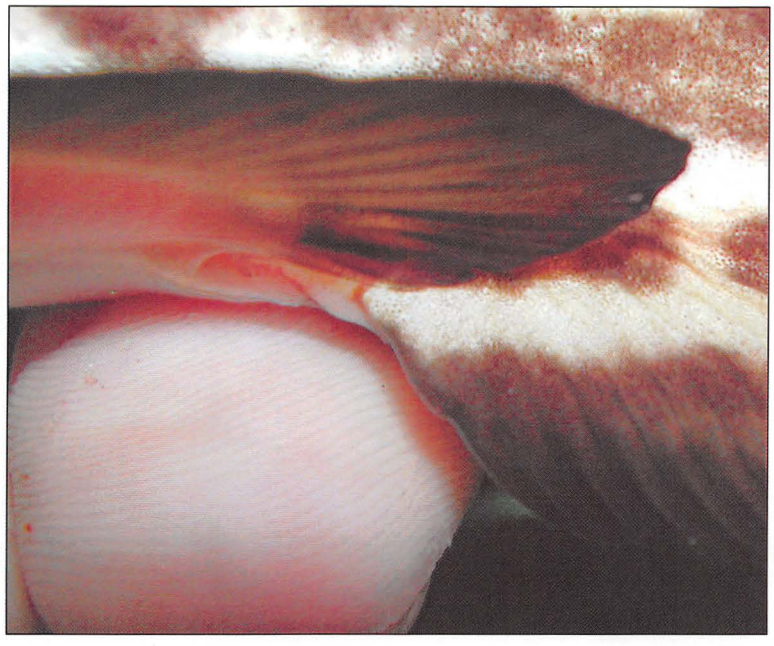


***T. anduzei* – headshot**

Sexing

As per Ferraris & Fernandez (1987) *T. taeniatus* sexes can be differentiated by the females having the anterior anal fin rays the same thickness as the other rays. Whereas in mature males the last unbranched ray and the first two branched rays are both longer and slightly thicker than those immediately posterior to them (see images). Also, in males the urogenital pore is located at the distal tip of the anterior margin of the anal fin. Whereas females have an enlarged pore anterior to the anal fin base. Also, mature male *T. taeniatus* have proportionately longer[1] dorsal fin spines (see images), and the spines are serrated on the upper half of the posterior margin.

T, taeniatus urogenital region, Male above, female below



In. *T. anduzei* mature males also have the thickened anal fin rays, and females do have the enlarged urogenital pore placed prior to the anal fin. However mature male *T. anduzei* do not appear to have the posterior edge dorsal fin spine serrations (Ferraris & Fernandez 1987) and I have found that dorsal fine

[1] Dorsal fin spine length as a percentage of the predorsal length.

spine length in my mature female is almost exactly proportionately the same as the mature male holotype[2]. In both species the females also have a thicker/broader head and body than the males.

Aquarium care

ph 6.2 to 7.0
Temp 22.0-26.0°C or 71.6-78.8°F

Both species are peaceful (albeit they may swallow small fish). They will hide during daylight and will wedge themselves into pipes and caves. If you have the opportunity of purchasing any of the two species, please ensure you get more than one specimen (you will be lucky for *T. anduzei*!) as they are a social species. This will also mean you can attempt to get both sexes you can try and breed the species, as this has not successfully been done as yet, although one aquarist has had approx. 100 unfertilised 1.5mm eggs (Finley, 2006).

In low light levels they can sometimes be tempted to come out by adding food to the tank. They will eat both dried and live foods, but they should not be just restricted to one or the other. If you do have them in with other catfish please ensure you put enough food in before 'lights out' or they may not get enough food and can become quite thin, as they are predominantly active in darkness.

An alternative is to have a pipe or cave with a gap cut into the top and live food such as chopped earthworms can be dropped through the hole before 'lights out'.

Acknowledgements

Thanks to Carl Ferraris for confirming my identification of *T. anduzei*.

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[2] Approx. 33.33% in predorsal length.

What's New? - Mark Walters

A few uncommon species have been seen available, including *Ancistrus ranunculus, Pseudacanthicus sp. 'L114', Tatia cf. dunni* (image below), *T. intermedia, Centromochlus reticulatus, C.perugiae, Pareutropius buffei, Orinocodoras eigenmaniii*

A rarely encountered woodcat. Male *Tatia cf. dunni* - pic courtesy Steve Grant

New Corydoras Species

Two new Corydoras species have been described recently from NorthWestern Argentina.

In addition, the paper, published in 2009, also redescribes *C. micracanthus* as the type species for a distinct 'species-group'.

C. micracanthus and the new members *C. gladysae* and *C. petracinii* have reduced dorsal and pectoral spines; slightly emarginated caudal fins; low body depth; parieto-supraoccipital process and nuchal plate not in contact and small eyes for the genus.

Corydoras gladysae, a new species from the Calchaquí river, is distinguished from other species of the genus by the caudal fin shape, slightly emarginated and by presenting the shortest dorsal and pectoral spines length (mean = 9.2 % and 14.8 % of SL, respectively).

Corydoras petracinii, a new species from the Las Costas river, is distinguished by the following combination of characters: dorsal spine short (mean = 16.6 % of SL), pectoral spine short (mean = 18.3 % of SL), body moderately elongate (body depth 29.5 % SL mean), caudal fin slightly forked and trunk flanks with 5–7 subsquare differenced blotches in the middle region.

Corydoras micracanthus, from the Mojotoro river basin, is defined by its higher number of dorsolateral body plates (24–26) and trunk color pattern, presenting 4 to 6 subsquare blotches well differentiated in the flanks. The inclusion of these species into the genus *Corydoras* is discussed. Full details can be found in the paper:

Pablo A. Calvino & Felipe Alonso, 2009. Two new species of the genus *Corydoras* (Ostariophysi: Siluriformes: Callichthyidae) from northwestern Argentina, and redescription of *C. micracanthus* Regan, 1912. frRomev .n Mortuhsw. eAstregrenn Atirngoen Ctiineanc. Nat., n1.9s9.11(2): 199-214

Images of all the described Corydoras species (from the 'micrancanthus' group) can be found at **CorydorasWorld.com**

New Peckoltia

The leopard frog pleco, commonly known as L134 has been described as *Peckoltia compta*.

The loricariid genus *Peckoltia* includes 13 valid species (and many undescribed L numbers) ranging throughout the Amazon basin in Brazil, Venezuela, Colombia, Peru, and Guyanas. *Peckoltia* is included in the tribe Ancistrini. The paper describes a new species of *Peckoltia* from the rio Tapajós drainage, Pará State, Brazil.

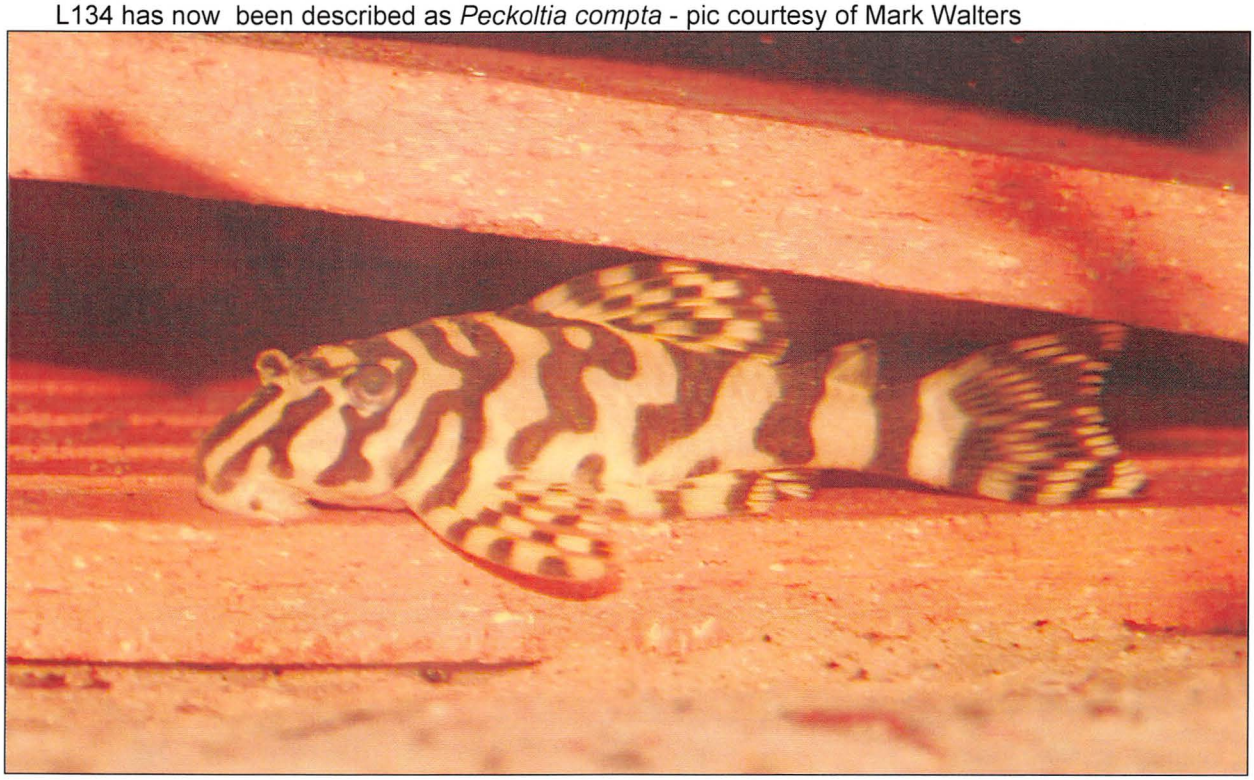
Peckoltia compta is characterized by a bold color pattern consisting of large dark transversal bars on body and thick longitudinal dark stripes on snout and head. The new species is most similar in color pattern to *P. vittata* (as far as described species go) but can be distinguished from all its congeners by the presence of a pale line inside each dark stripe running from the snout tip to anterior margin of eyes (vs. absence of such clear lines and a mottled appearance in *P. vittata*, and a mix of vermiculations and spots on the head of the remaining congeners). A brief discussion on the taxonomic status of the nominal species *Peckoltia vittata* is also included in the paper.

Full details can be found in the paper:
de Oliveira, RR, J Zuanon, LR Py-Daniel & MS Rocha, 2010. *Peckoltia compta*, a new species of catfish from the Brazilian Amazon, rio Tapajós basin (Siluriformes: Loricariidae). **Zootaxa 2534: 48–56.**

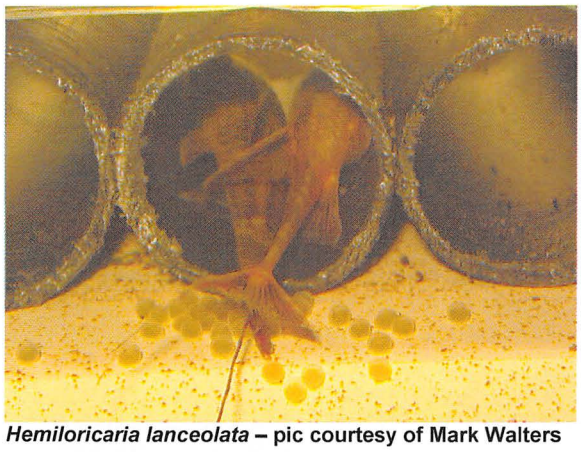
If you have any sightings you would like to share or would like to track down a paper featured, contact me for the full reference: mark.walters100@yahoo.com.

Acknowledgement is made to Planet Catfish, Practical Fishkeeping for the original source of information on papers.

L134 has now been described as *Peckoltia compta* - pic courtesy of Mark Walters



CSG Breeders Award Programme Mid-Term Report
A W Taylor B.A.P. Secretary.



Hemiloricaria lanceolata **– pic courtesy of Mark Walters**

A committee re-shuffle, saw the previous BAP Secretary Mark Walters move to the position of Journal Editor and me take on the role of BAP Secretary. I would like to say a big thank you to Mark for all his efforts from its inception to its smooth running over the last few years as B.A.P. Secretary. Hopefully I can continue in the same vein.

At the moment I am patiently awaiting B.A.P. submissions, although I have had a few since taking over from Mark, but not enough for my liking. I would like to urge all members who breed catfish as part of their hobby to submit breeding reports. I know many of you are fantastic breeders of fish and it would be a shame if the hobby could not gain an insight into the many varied ways that members spawn their catfish.

It is not just your breeding success's that is of importance it is also your part success's; like, 'I got eggs but none hatched' or 'the eggs hatched but the fry died after 12 hrs', etc, etc. I know it is against some people's nature to admit to failure in any degree, but even getting some catfish to spawn at all even if the eggs are not viable is a success in its self, and therefore these should be treated as success's not as failures. The B.A.P. is also structured in such a way that any member no matter where they live in the world can participate.

What is the end product? The aim of the B.A.P. is to keep as database of members catfish-spawning endeavours, both part and full success's. It is only when it is deemed by the B.A.P. sub-committee that enough data had been submitted and the information gathered has been correlated that the CSG will publish a special 'Breeding journal' for the benefit of the CSG and its membership.

Of course a bye-product of the B.A.P. is that 'Cat Chat' will also benefit by having breeding reports submitted for printing as part of the B.A.P.

What is in it for the members? You may ask. Well apart from the satisfaction of knowing that you have contributed to the only database of this nature in the world, and that in all probability be of interest to the scientific community.

Any publication resulting from the database will be the property of the CSG and its membership, not any individual.

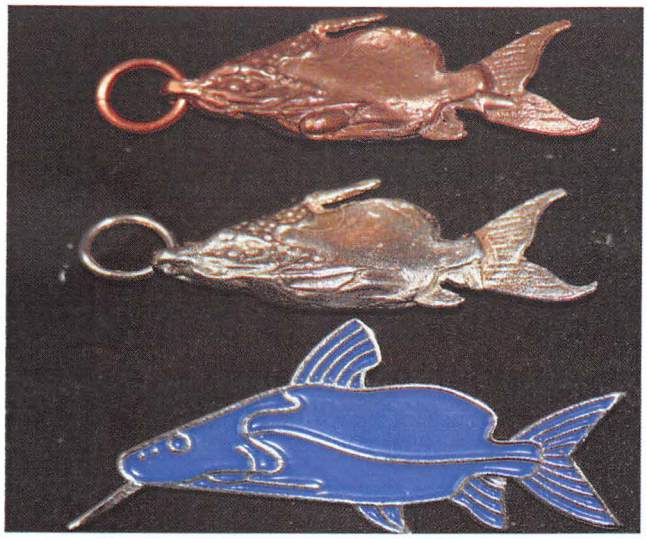
As a participant you will be awarded points for varying levels of achievements, including just getting your fish to spawn let alone having the eggs hatch out.

Awards

When enough points and criteria have been reached there are three very special and unique awards that are given.

There is a Bronze award; which is awarded for participants attaining 500 points and covering the spawning of at least three catfish genera, a Silver award; which is awarded for participants attaining 1000 points and covering the spawning of at least six catfish genera, and a Gold award; which is awarded for participants attaining 2000 points and covering the spawning of at least ten catfish genera.

As well a receiving a certificate for attaining each award there is like I said "three very special and unique awards". These are '3D' medals in Bronze, Silver and Gold of the African catfish *Brachysynodontis batensoda* specially made by artisan's in the North West of England and will be presented in person at the CSG's 'blue ribbon' event the Annual Catfish Convention, whenever possible.



Awards From top: Bronze, silver and Blue pin awarded at CSG Open show

At the moment the B.A.P. has five members working towards the Bronze award, one member working towards the Silver award, one member gained the Silver Award (to be presented) and now working towards the Gold Award and another member working towards the Gold Award.

So come on members get your registrations and reports sent in and become part of this unique Breeders Award Programme.

Points gained to date:

Mark Walters.....2020
Adrian Taylor.....1125
Ian Fuller.....1065
Dave Penney.....440
Keith Jackson.....220
Allan James.....135
Eric Brodrock.....80
Frank Falcone.....20

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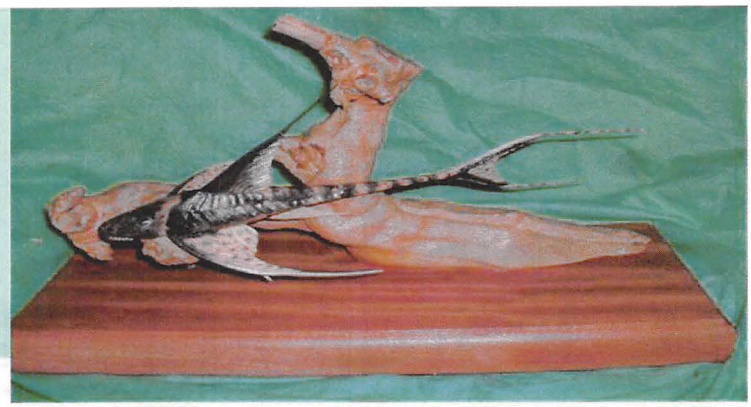

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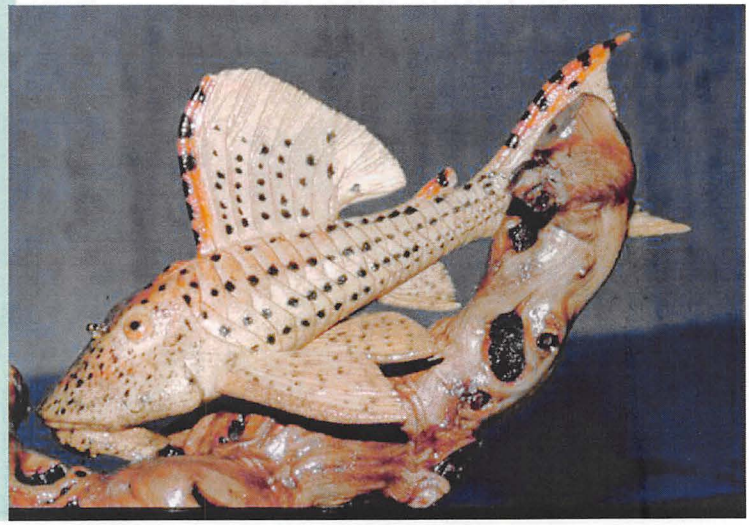

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