The Journal of the Catfish Study Group

CAT CHAT

A report on Spawning Scleromystax 'species C12'

Ameiurus

Natural But Nice

OPEN SHOW RESULTS 2007

BAP Spawning Records

Edward Drinker Cope

Volume 8 Issue Number 3
September 2007
Once again the journal is a bit late, this is due to not being able to catch up on articles after the March issue was delayed. I now have two months to produce the December issue which, I hope will be on time if people give me some articles to publish.

I have to mention that I retired last December and, after being the Editor of Cat Chat for some eight years and 32 issues (including the Dec issue), I have decided to cut down. I will be helping out and you can still send articles to me but I wont be doing the printing. Details haven’t been finalised so you’ve still got me for a little while.

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CAT CHAT
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Firstly, our apologies for the lateness of this issue of Cat Chat and the last two issues. The reason for this is quite simple, lack of material. Without input from you, the members and there are around 200 of you out there, we have nothing to put in. Yes! OK, there is my little bit of news and reports interlaced with a fair amount of moans and groans; we have Mark’s science news. Some of the BAP reports are coming to their final stages, and we should start to publish results in the future issues. However, we also want to know what you are doing with your Catfish. As I said, there are around 200 CSG members worldwide and if each of you wrote one paragraph, or even an article - heaven forbid, the Editor would be totally snowed under. If you haven’t already done so, how about sending a short profile of yourself to the Editor for the “Meet the member” section together with a picture of yourself.

Now I’m down off my soapbox and on a brighter note, September 16th was the day of the CSG’s annual Open Show and a great day it was. There were several records broken, which was very pleasing in this day and age when aquatic societies are slowly disappearing. Firstly, we had more entries for more than ten years, in spite of some big names in the show world not attending. The auction also realised a record profit, as did the raffle and canteen. Add to this a superb response to the class sponsorship and to say the day was a great success would be a gross understatement. The most pleasing aspect of the show itself were the number of entries in the breeders section, there were 26 entries in the Cory section alone, glad I was showing and not judging, it must have been the hardest class of the show to judge. I am already looking forward to next year’s event, which I am sure will be even better. The Show results are elsewhere in this journal.

Moving forward to our major event of next year, the Annual Catfish Convention will take place over the weekend of 15th – 17th February at the Britannia Hotel Standish, Wigan. All the arrangements have been made, the speakers are all booked, the programme has been set out and the tickets have been printed. Now is the time for you to get involved, simple really, mark the dates in your calendar, order your ticket, then sit back and before you know it you will be there.

This Convention promises to be the best one we have done and I hope that you will all want to be a part of it. The full details and prices can be found here in this issue and also on the CSG Website www.catfishstudygroup.org/core/conventionlocation_2008.htm
The beneficial use of live food has long been recognised by aquarists and they have been fed to our fish, in one form or another, for almost 2500 years since the birth of the fishkeeping hobby. Today a number of different live food organisms can be utilised as food for our aquarium fish including naturally occurring collected live foods, home cultured live foods and both pre-packed live food and the frozen or freeze dried live food organisms that are available from our local aquatic store.

Many of the fish that we as aquarists maintain in captivity are extremely adaptive and the vast majority will readily consume, and in fact thrive upon, standard offerings of dry foods such as flake or granules. However, a noticeable difference to the health, vigour, growth rates and colouration can be seen in those animals fed on a varied, well balanced diet that incorporates live foods similar to those found in their natural biotope.

**Natural live food and the benefits.**

In the wild a wide variety of food items are exploited by fish in order to provide the basic nutritional requirements to sustain life and live foods form an integral part of the fish's diet. The live foods exploited by fish within their natural habitats can include bacteria, protozoa and other micro organisms as well as a wide range of aquatic and non aquatic insects, worms, snails and crustaceans, amphibians and other fish. These natural organisms are, for the most part, high in nutritional quality and are an important source of protein, lipids (fats), carbohydrates, minerals, vitamins and enzymes that act as mild laxatives as well as making digestion more efficient for the fish.

The natural feeding instincts of both adult fish and fry are often stimulated by live foods and fish will respond more eagerly to living prey rather than inanimate foods, the movement creating a response in all but the sickest of fish. Some species of adult fish and fry will in fact only recognise and accept live foods as being edible; many species will frequently starve to death rather than feed upon dry foods.

The term immunostimulant could also be applied to live foods as many contain ingredients whose primary function is to enhance and stimulate the immune response in fishes.

The benefits of feeding live foods have also led breeders to utilise natural foods as an aid to help condition prospective stock for breeding purposes. Female fish often become ripe with eggs after being fed both regularly and heavily upon live foods which can help to induce spawning activity in the majority of easily bred species and at times even in some of the more difficult species.

**Bio-encapsulation.**

It is also possible to beneficially alter the nutritional profile of some live foods such as brine shrimp, daphnia and rotifers using a process known as bio-encapsulation or gut loading. Specially formulated enrichment components containing emulsified fish oils are offered and ingested by the live foods prior to being fed to the fish. Emulsified fish oils contain HUFAs (Highly unsaturated fatty acids) and have a very high nutritional, vitamin and calcium content. The use of other high protein enrichments including Spirulina (60%-70% protein) and colour enhancing supplements such as the carotenoid Astaxanthin can also be beneficial and are often used to gut load Microworm, Grindal worm and Whiteworm. Vitamin supplements intended for infant use can also be incorporated into the culture medium and diet of many live foods.

**A point to consider.**

Despite all of the benefits associated with feeding live foods it is also important to note that there is one slightly negative point to consider. Live foods and in particular wild collected foods such as the Tubifex worm can harbour pests and diseases in the form of microbial pathogens (bacteria and viruses) and parasites that often occur in the gut or body tissue of the live food organisms and also in the water from which these foods are collected.

Cultured live foods are much less likely to carry harmful pests but it is often beneficial to purge any live foods by soaking for approximately 30 minutes in a weak 1% stock solution of Potassium permanganate (10 mls per litre of water) which can help to rid them of any parasites or bacterial pathogens that may be present. The gut can also be purged by rinsing live foods 3-4 times in clean freshwater until the water runs clear. Following these procedures will certainly help to reduce the risk of disease but will not completely eliminate all of the parasites and pathogens that might be present within the gut and body tissue.

Personally I have fed live foods daily for a number of years as part of my fishes staple diet and I have not encountered any serious problems with feeding these natural foods apart from the odd outbreak of Hydra, from overfeeding brine shrimp, that is easily cured.
However the risks associated with the introduction of pests and diseases via live foods is something that cannot and should not be completely overlooked.

Sources of Live Foods.
Live food organisms are often divided into two categories, collected wild foods and cultured live foods. Collected wild foods such as the freshwater crustaceans Daphnia (water flea), Cyclops and other free swimming copepods as well as Culex (black mosquito larvae), Glassworm (white mosquito larvae) and Chironomus (bloodworm) can often be found occurring naturally in nutrient rich ponds and still water bodies with silted or muddy substrates. Gammarus (freshwater shrimp) and Asellus (water lice) occur in clear shallow running freshwater such as ditches, streams and rivers. The common earthworm (Lumbricus terrestris) and the smaller and more suitable redworms (Bimastrus foetida and lumbricus rubellus) are all easily collected in moist areas rich in leaf litter or from within the compost bin and can be utilised by aquarists to feed larger species of fish.

The majority of these natural live foods are easily collected and many can also be cultivated and maintained outdoors in water butts etc during the warmer months of spring and summer.

Cultured live foods are a very economical way of providing a steady supply of live organisms that are suitable for feeding to both young fry and adult fish alike. Micro organisms (Infusorians, Paramecia and Rotifers) at a size of only a few microns can be cultured to feed the smallest of fish fry. Newly hatched Artemia (Brine shrimp), Microworm (Panagrellus silusae) and Vinegar eel (Turbatrix aceti) are cultured as a food for slightly larger fry or as a second food for those initially requiring micro organisms. A number of insect and worm species are also cultivated as food for aquarium fish. Insects such as the Fruit fly (Drosophylla sp) for surface feeding fish and both Grindal Worm and Whiteworm (Enchytraeus sp) can be utilised to feed juvenile and adult mid water and bottom dwelling species.

Live food starter cultures can be obtained from biological and aquaculture supply companies, live food suppliers, fish club auctions or from fellow aquarists. The vast majority of cultivated foods are easily cultured using mediums and foods that are readily available within your local garden centre and supermarket.

Conclusion.
Personally I am of the opinion that the benefits associated with the collection, cultivation and incorporation of natural food organisms into the diet of our fish makes live foods a "must" for any serious hobbyist, aquarist or breeder of freshwater tropical species.

In this series of articles on live foods we will discuss the various live food organisms that are available to the hobbyist including their collection, cultivation, nutritional values and their value as a food source for our aquarium fish.

Next time....
In the next article I will outline the use of the microorganisms Infusoria, Paramecia and Rotifers with the emphasis being on their importance as a first food for the smallest of fish fry.
The well-known American paleontologist, herpetologist, and ichthyologist, Edward Drinker Cope was born in Philadelphia, USA, on July 28th 1840 to wealthy Quaker parents. At an early age Cope wrote a paper on salamandridae to the Philadelphia Academy of Natural Sciences and he became associated with a group of young scientists in Washington and joined the so called "Megatherium Club (1857-1866)" which was a society that had many members who had no formal scientific education. Through their diligent studies and observation they became well known and respected in their own fields. These young scientists gained some notoriety at the Smithsonian in Washington for the hard work that they put in during the week and also, it has to be said, their habitual carousing each weekend which got them into trouble on more than one occasion.

Cope went on study at the University of Pennsylvania and in Europe. In 1865 he was appointed curator to the Philadelphia Academy of Natural Sciences; a post, which he held until 1873. During this time Cope was also appointed to the position of Professor of Natural Science at Haverford College (1864-1867). With his speciality being in paleontology; Cope was offered and accepted the position of Professor of geology and palaeontology, at the University of Pennsylvania in 1889. In total through out his academic life, Cope published an astonishing 1,200 plus scientific papers, many on new species. However, Edward Drinker Cope may be best remembered more for his involvement in the notorious so-called "Bone wars".

The Bone Wars, started out as a friendly competition between Cope and rival Paleontologist, Othniel Charles Marsh. Both Cope and Marsh came from wealthy families that had large fortunes which they both used to fund their expeditions around America in search of fossilised remains of animals, especially dinosaurs.

What started out as a friendly rivalry, ended up a bitter and sometimes bloody race against each other in their pursuit of more and more new discoveries? On one occasion Cope stole Marsh's train, which was carrying quite a considerable amount of fossil bones. Due in part to this intense rivalry and eagerness to out do each other, both made mistakes in some of their descriptions. On one such occasion Cope had connected the head of one fossil not to its neck but to the tip of the tail. Later, a mistake that Marsh made was where he had put the wrong head on a brontosaurus, a fact that went unnoticed until as late as 1981. Each took great pleasure in ridiculing each other to the press and other scientists.

Due to Cope's Quaker upbringing and beliefs he became one of the founders of the Neo-Lamarckian School of Evolutionary Thought; which believed that changes in the timing of embryonic development and not natural selection was the force behind the evolution of species.

Due partly to his bitter feud with Marsh and financial ruin, Cope died in his home city of Philadelphia on April 12th 1897. In his will, he left his body to science with the request that although he had left his brain to the Wistar Institute, his body should be used as the 'Holotype' of Homo sapiens but his body proved to be unsuitable for such a purpose.

In 1913 John Treadwell Nichols at his own expense published a journal for the American Society of Ichthyology and Herpetology and named it 'Copeia' in honour of Edward Drinker Cope and this journal is still being printed today.
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Breeding Brochis splendens
(Castelnau – 1855)
by Danny Blundell Member No 5

During 2004 I purchased seven Brochis splendens and after quarantine they were acclimatised and released into my 6' x 2' x 2' community tank in the dining room. The fish were fed and watered until August 2006 when they were transferred into a 48" x 18" x 18" planted aquarium in my fish room.

Ann and I were due to go on holiday in October, so I started the intensive maintenance programme prior to our departure. I had to decide whether to return the Brochis to their previous home or to temporary accommodation. I decided on the latter, which consisted of a 24" x 24" x 12" high tank on the top row in the fish room. Filtration consisted of an under gravel system which covered 20% of the base, the remainder being ‘bare bottomed’ and extra turbulence was provided by a Fluval 4 internal power filter.

I had maintained this tank 5 days earlier by turning off the filtration, stirring up the gravel and siphoning all the dirty water out of the fish room window onto the garden. The tank was then refilled with tap water dosed with ‘API Stress Zyme’ and the filtration reactivated. Before transferring the fish, I added the tank decor consisting of pieces of bogwood to which I tied plants using fishing line. I use Anubias sp., Indian Fern and Microsorium windlovii which are tough, easy to grow and propagate in my low light conditions with just the addition of a few drops of aquarium fertilizer. Later that day they were fed 2 blocks of frozen bloodworm, the room lights extinguished and that night we had a huge thunderstorm.

**Spawning No 1**

<table>
<thead>
<tr>
<th>Spawning Date</th>
<th>11.10.2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH</td>
<td>6.5</td>
</tr>
<tr>
<td>Temperature</td>
<td>27°C</td>
</tr>
<tr>
<td>Pressure</td>
<td>1004 mbar</td>
</tr>
</tbody>
</table>

The next job was to grab the camera and record this fortuitous event, see below.

By midday the spawning activity had ceased, so I removed the adults to an empty planted tank to recuperate and added Pimafix to the breeding tank at a concentration of 7ml per litre.

The eggs were 2mm in diameter, with low adhesion to the glass, approximately 1 to 2 on the Ian Fuller scale.

The fry were free swimming by the 17.10.2006, but we were due to go on holiday the next day. Normally my daughter looks after all my fish during our vacations, but on this occasion I asked her not to feed this tank as I feared that any excess food would pollute it. To give the fry any chance of survival I added a quantity of Liquifry No 1 for egglayers, I then squeezed the contents of the internal filter sponge into the tank and finally I added some Loricarid faeces from another tank.

We then departed for our holiday.

On our return I was surprised to find that a dozen or so fry had survived, so I started on a regime of feeding and small water changes. Over the next few months I witnessed the most amazing changes in shape and colour patterns, the resulting photographs follow overleaf.

The first spawning were raised in their breeding tank for 6 weeks, and then transferred to a 48" x 18" x 18" growing on tank.
Spawning No 2

The 24" x 24" x 12" breeding tank was drained, cleaned and refilled as described prior to spawning No 1.

The barometer was indicating rising pressure when the adult fish were introduced into the tank and fed with frozen bloodworm. The next morning the fish had spawned and were again transferred to their holding tank. Pimafix added as previously.

Spawning Date: 23.11.2006
pH: 6.9
Temperature: 27°C
Pressure: 972-986 mbar

The eggs hatched by the 28.11.2006, Liquifry was added and 2 days later a small pinch of superfine fry food. The fry grew well for 6 weeks and were transferred to a 48" x 18" x 18" growing on tank as we were off on a months holiday, leaving our daughter in charge. On our return I found all of the second spawning babes had perished as I had not put any coral sand into the filter and the pH had slid to a lowly 5.0, an important lesson learned.

I use five tanks to spawn a limited number of catfish species and am reasonably successful, however, I was not satisfied with the undergravel filters as they clog too easily. I decided to replace them with 'Hamburg' Sponge filters as described in 'Catchat' Vol 5, No 3, 2004.

For the 24" x 24" x 12" inch tanks I purchased 24" x 12" x 3" thick medium blue sponge, the water being circulated by an old Eheim internal power filter.

The pH was maintained by the addition of coral sand contained in a cut down pair of tights positioned behind the sponge.

Spawning No 3

Spawning Date: 19.03.2007
pH: 7.0
Temperature: 28°C
Pressure: 998-1017 mbar
CATFISH STUDY GROUP

9th Annual Convention
15th - 17th February 2008

at
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Speakers include:
- Dr Michael Hardman - Finland
- Dinyar & Rusty Lalkaka - USA
- Dr Martin Taylor - UK
- Mr. Mark Breeze - UK
- Mr. Brian Walsh - UK

Programme

The event kicks off on Friday evening with an informal dinner followed by a CSG presentation by Brian Walsh.

Saturday

Morning: a series of workshops. Subjects include: live food culturing, fish photography, diseases and parasite control. There will also be specialist society stands from the AAGB, BCA, BLA, BKA and the UKAPS.

Afternoon: there will be two talks,
- Rusty Lalkaka on the ‘Catfishes of the Nile, Congo and Rift Valley.
- Michael Hardman on “Reproduction in Catfishes”
  - Pt. 1 Review of what’s known.
  - Pt. 2 Endocrinology of reproduction’.

Evening: The Convention Dinner which will be followed by an open forum based on Michael Hardman’s afternoon talk.

Sunday

Michael Hardman on Pt 3 “Reproduction in Catfishes” How reproductive biology relates to other aspects of Catfish biology.

Mark Breeze This year’s none Catfish presentation on Keeping and breeding Dwarf Cichlids of the family Apistogramma.

Martin Taylor “Phylogeny of Corydoradinae Catfishes”.

Dinyar Lalkaka will give the final presentation of the day about ‘Asian catfishes’

For further information contact:

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Adrian Taylor - Secretary
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This article presents sightings and abstracts for four scientific papers for which further details are available.

Catfish sightings: Following on from the list of not­usual or new species available in the hobby, the following have been sighted: Mochokiella paynei, Synodontis nummifer, S. alberti, Hemibagrus wyckii, Corydoras fowleri, C. griseus, C. gossei.

Selected scientific papers:

Ribeiro FRV and CAS de Lucena (2006) - A new species of Pimelodus from the Rio Sao Francisco drainage, Brazil has been described. P. pohli reaches a size of around 20cm and along with P. fur and P. maculatus, is one of three Pimelodus species found in this region.

Salcedo NJ (2006) - Two new species of Chaetostoma have been discovered in the Huallaga River in central Peru. The Huallaga is a torrential river making it difficult to navigate and hard to explore. C. daidalmatos has large dark rounded spots on the body and the dorsal and caudal fins. C. strumpoulos has dark rounded spots only on the body. The bulldog plecs were discovered in the river 650m above sea level.

Ng, HH & I Rachmatika, 2005 - Glyptothorax exodon, a new Sisorid catfish has been discovered in Borneo. It can be distinguished from other closely related species, except G. platypogonides and G. siamensis, in having a slender body. It differs from G. platypogonides in having a deeper caudal peduncle and from G. siamensis in having a larger eye and a mottled color pattern lacking distinct pale stripes.

Provenzano F & Milani N, 2006 - An endangered species of suckermouth catfish, Cordylancistrus nephelion, has been described from the Tuy River in Venezuela. It can be distinguished from other members of the genus by its unique colour pattern of white spots. The extreme alteration of this river system has left its fauna in a perilous situation.

If you have any sightings you would like to share or would like to track down a paper, contact me for the full reference: mark.waiters70@ntlworld.com.

Acknowledgement is made to Planet Catfish, Practical Fishkeeping and the All Catfish Species Inventory (ACSI) database for the original source of information on papers.
It was while on the way to the club meeting in May that I had by chance an occasion to visit a store that had been regarded for some time as one of the best stores in the North West of England, and one that I don't get to as often as I like. After looking around the tanks, the proprietor pointed out some rather smallish Scleromystax catfish that had been hiding away in a large clump of java moss, after giving them careful scrutiny, and having left my reading glasses in the car, I asked Steve (the proprietor) to catch me one male and two females, as at first glance it was hard to distinguish between male and female, there were at the time some other CSG members in the store and between them and Steve they managed to find what was a definite male and female, it was after some time and quite a bit of discussion that I agreed, that finding a definite female in the remainder of the small shoal was unlikely, and I agreed to accept that the third catfish may turn out to be a subdominant male.

After arriving home later that night, I realised that I had no spare tank in which to place them in, and after a quick look around the tanks in my fish house; I decided to put them into a tank that had some Corydoras paleatus fry and some bristle noses in.

Water changes were being carried out at a ratio of 25% every other day, as I was feeding heavily the C. paleatus fry. A few days later and the fish seemed to have settled nicely in the tank and were feeding well. On the morning prior to the C112's spawning, I found one of the trio dead, upon inspection this turned out to be the third specimen, the one that had a question mark over its gender. The following morning I found some twenty-four eggs laid close together in a clump; however, these were not stacked as is the case of S. barbatus. These eggs were removed from the side of the tank and placed in a hatching tray and to which a small air stone was immersed.

Concerning the death of the third fish, I had heard from another aquarist that they had found that the males of this species had a tendency to be belligerent towards one another, maybe the third specimen was a male and the demise of which, was a direct result of aggression from the other dominant male? As water quality checks showed no anomalies.

70% of the eggs hatched forty hours later and these took a further forty-eight hours to absorb their egg sacs. It was shortly after the fry had absorbed their yolk sac's that I transferred them to one of my fry growing on tanks, and

Continued from previous page

Only 6 eggs were laid but fungused by the end of the day and no more were laid.

Over the next 28 days the pressure remained constant between 1020 m bar and 1022 m bar and no matter how often I changed water, the fish did not spawn and to date, the fish still have not spawned.

Following discussions with Brian Walsh, who bred this species in 1990, we suspect that they are seasonal spawners.

To complete this project I need to confirm that:

(1) these fish will spawn between October and March;

(2) the trigger is both a large [100%] water change and a positive pressure change;

(3) to photograph the sexual dimorphism.

Hopefully this time next year I can report back on my
which contained mature water from the parent tank and was filtered by an air powered sponge filter. The fry were fed for the first two days on infusoria, and then were fed on a mixture of infusoria and a small amount of pre-soaked powdered flake food for the next week and a half, after which, the fry were fed on a diet of powdered flake food, micro worm and newly hatched brine shrimp, after a further week the fry were accepting grindal worms as a part of their diet. Water changes were carried out at a ration of 40%, every third day.

When the fry reached 10mm SL, I moved them on to a larger tank, which was filtered by a large air powered sponge filter. So far these Scleromystax's have proved to be quite a hardy little catfish, as they had survived a water quality issue beyond my control when they were 2 months of age, and have shown no ill effects from this degradation of water quality.

### Ameiurus
by Heok Hee Ng

This is the first of a series dealing with unwelcome guests in the siluriform world, i.e. catfishes that have established breeding populations outside (often way outside) of their natural distributional ranges. These unwanted introductions are always the result of human activities, inadvertent or otherwise. The first of this series deals with a subject close to home...the presence of the North American bullhead catfish _Ameiurus_ spp. in European waters. Bullhead catfishes belong to the family Ictaluridae, a group native to the North American continent natively occurring from southern Canada to northern Guatemala. Ictalurid catfishes were first introduced to Europe in the late 19th century, arriving in France from North America in 1871, and again in various parts of Europe throughout the 1880s (Belgium in 1884; Germany, England and the Netherlands in 1885). Most of the first introductions were intended for aquaculture, although ictalurids rapidly fell out of favour as cultured food fishes in this part of the world. Subsequent introductions may have been due to releases from the aquarium trade (it was recorded in the late 1970s that commercial fish breeders in northern Italy were exporting large quantities of ictalurids).

It was thought for a very long time that only one species - _Ameiurus nebulosus_ (the brown bullhead) - was introduced from North America, but given the probable source (sloughs of the Mississippi River basin in which young fish were trapped when the seasonal floods receded), it is almost certain that other ictalurid species were also included. In any case, the two most common established ictalurid species are the brown bullhead and the black bullhead (_Ameiurus melas_). Both species are found throughout much of western and central Europe; with the ranges constantly expanding (the range of the black bullhead has extended to the Tagus River drainage in Portugal as recently as 2000). In some areas, bullhead catfishes are capable of reproducing rapidly to the point that dense, stunted populations are found in some water bodies. In France, evidence has also been found that human activities may inadvertently facilitate the spread of bullhead catfishes: the decrease in agricultural practices in the Brière marsh (in the Loire River estuary) has led to an increase in reed bed habitats, the preferred habitat of _Ameiurus melas_.

In Europe, bullhead catfishes threaten native fishes because of their predatory habit and their potential to successfully outcompete native fishes for resources (on the account of their high fertility, parental care, voracious habit and ability to withstand low oxygen levels, polluted waters and high temperatures). This is particularly a problem in areas with considerable ichthyofaunal endemism, such as the Iberian Peninsula, although it has to be noted that concrete evidence of the catfish displacing native fishes due to competition is still lacking.
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Thurs: 10 am - 8 pm
Sunday: 10 am -4-30pm
Dirty Fish-Dirty tank [Vol 8 No 1], a Reply

Dear Bill,

I have a 48 x 18 x 18 tank which I use to breed and raise Ancistrus catfish and have experienced their prodigious production of waste. My system consists of a 'bare bottomed' tank with a large quantity of bogwood, an external power filter and a power head used to prevent the formation of surface scum. With this system the excess faeces collects in two areas of the tank, which I can siphon off routinely.

The external power filter is set up as in the picture below.

The left hand canister was an old burnt out filter which I cut the cable off, and removed the impeller, the right hand unit is the working power filter. The tank water is siphoned into the right hand canister and pumped via the left hand canister back to the tank, this system doubles the filter material.

The right hand filter contains ceramic pre-filter and a quantity of coral sand to maintain the pH, whilst the second canister contains more ceramic filter material, followed by a layer of open weave Japanese matting, and then a finer sponge layer.

In the past I have experienced the premature reduction in flow rate following the filters being cleaned, the filters being the old brown Fluvals which are still working well. I have reduced this problem by preventing the final filter sponge from floating to the top of the internal canister and restricting the flow. To this end I cut a piece of 'eggcrate' to fit into the internal canister as in the picture below.

I hope these ramblings are of some use.

Regards,
Danny Blundell
Membership No 5.
The Breeders Award Programme (BAP) was launched on March 1st. The programme encourages CSG members to log and submit breeding reports against successful catfish spawnings.

In the first three months of the programme, 35 registrations had been made for 29 species, full details are available, in the first quarter report, on the CSG website. During the second quarter (to the end of August) a further 15 registrations have been made for a further 13 species.

<table>
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<tr>
<th>Reference</th>
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Points have been accumulated by members for submission of Stage 1/2 reports and, more recently, an influx of stage 3 reports for successful rearing of fry to at least 3 months.

Additional points should be achieved by the end of the next Quarter (November end) for 6 month old fry development records plus 20 extra points for the first time recorded species. This ill generate a significant number of reports for the CSG magazine and qualify some members for the bronze award before the end of the year.
Would like to thank all our **Open Show** sponsors for their valued support.
## OPEN SHOW RESULTS 2007

**158 entries**

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| 15 | LORICARIIDAE L & LDA No’s over 130 mm | ENTRIES 0 |

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| 19 | PIMELODIDAE over 100mm | ENTRIES 0 |

| 20 | COLDWATER CATFISH | ENTRIES 0 |

| 21 | A.O.V. CATFISH - SOUTH AMERICAN | ENTRIES 0 |

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SPECIAL WINNERS 2007

Best Fish in the Show.
The TetraMin Award (Classes 1-23)
1 Dave Bent of CSG for a Corydoras Sterbai (Class 4)
2 Stuart Brown of CSG for a Mochokiella paynei (Class 16)
3 Stuart Brown of CSG for a Scleromystax barbatus (Class 6)

Best Corydoradinae
Yvonne Cank Memorial Trophy (Classes 1-6)
Stuart Brown of CSG for his Corydoras diphyes (Class 3)

Best From Classes 7-11
Masterstaff Cup
D & L Speed of CSG for their Amblydoras hancocki (Class 11)

Best Loricariidae
Masterstaff Trophy (Classes 12-15)
D & L Speed of CSG for their L163 Big Spot Peckoltia (Class 14)

Best Overall Synodontis Species
LMB Aquatics (Class 16-17)
Stuart Brown of CSG for a Mochokiella paynei (Class 16)

Best Pimelodidae Species
S & P S Cup (Class 18-19)
Stuart Brown of CSG for a Microglanis poecilus (Class 18)

Best A.O.V. CATFISH
A.O.V. Catfish trophy (Class 20-23)
Roy Blackburn of Castleford for an Akysis maculipinnis (Class 23)

Best Pair
Clint Cup (Classes 24-28)
Roy Blackburn of Castleford for a pair of Akysis prashadi (Class 28)

Best Breeders
Kings Carpets Trophy (Classes 29-33)
Ian Fuller of CSG for his team of Ancistrus triradiatus (Class 30)

Best Catfish Over 300mm
J T Morris Trophy
No entries

Junior Trophy
Amanda Junior Cup
No entries
Dave Bent with his trophies and the Corydoras Sterbai (Class 4) which won Best in Show

2nd place: Stuart Brown CSG with this Mochokiella payrei (Class 16)

3rd place: Stuart Brown CSG with this Scleromystax barbatus (Class 6)

Above: Best Breeders won by Ian Fuller, CSG, for his team of Ancistrus triradiatus (Class 30)

Bottom right: Best Pair won by Roy Blackburn of Castleford for a pair of Akysis prashadi (Class 28)
The first time I saw this Cory was in a Werner Seuss’ Book. This clear stripe pattern and the golden spot in the neck were looking very attractive. But this species seemed to be unavailable. C. parallelus is known since the mid-1980ies, but this species is caught only very occasionally at the upper Rio Negro (the exact location is unknown). Most of them are exported to Japan (Evers 2005).

So it was a very special moment when I heard from Hans Evers that he was able to obtain a few parallelus and had a small breed from them. I’m sorry Hans, but I phoned him several times to hear how they are growing and finally I was able to obtain six of them. This was a dream coming true.

I received four males and two females in a size of about 3 cm, a bit more than half a year old and in best condition. They moved into a 60x30x30 cm Tank with a sponge mat filter, air driven waterpump and gravel/sand bottom. The tank was furnished with some Java moss, a piece of driftwood and a small clump of Anubias nana.

They received best food, based on Grindal worms (Enchytraeus buchholzi), frozen bloodworms and Tubifex. With this diet they were growing rapidly and put another cm on their length. I made occasional waterchanges, but only very slightly. When autumn was coming I increased the frequency of waterchanges, but to be honest, I didn’t believe that they were able to breed in this size. But I felt that it was better to bring them in seasonality.

In late December I found them spawning! It was only a few eggs, most of them were not fertile, but those eggs are really big! The biggest I’ve ever seen, about 3 mm in diameter. The eggs are very soft after they are laid and it is better to leave them for an hour at their place before collecting them. They are very sticky and sometimes it is difficult to get them off the finger.

From this first and only spawn in this season I obtained six fry. Not too bad! I was very much looking forward to the next year.

Winter 2006/2007 was my parallelus-year. The adults had grown up to a size of about 5 cm. The males more slender and a little bit smaller than the females. After a summer in a community tank with low food amounts and few waterchanges they moved in the same tank as in the year before and received the same nutritious food.

It needed only two weeks to see the females becoming round, with a big fat belly. Full of eggs! I started waterchanges of 30–40% with cool rainwater at the beginning once per week, later twice per week. And they started spawning!

The spawning behaviour was different to Evers’ description (Evers 2005) although his specimens are the parents of my specimens. While they made one large spawn in Evers’ case, in my case after a bigger initial spawn (about 50 eggs) they spawned regularly every week with 20–30 eggs per week. The eggs are deposited single, most of them were to find where the Java moss adheres to the glass.

All eggs are transferred to small plastic shells with aquarium water, added one drop of esha 2000 per litre. There is a air line in every shell, bubbling very slow.

After three days they hatched. According to the egg size, the larvae are very long (5 mm) with a big yolk sac. It took about another 3 days until they had resorbed the yolk sac and became free swimming. At this time I gave the first food (Microworms, Panagrellus redivivus). I prefer this food because it is sinking to the ground immediately – other than Artemia nauplii.

After a few hours it is easy to see if they have eaten. The belly is bigger and in case of microworms white. If they haven’t eaten, it is too early – make a waterchange and try again next day.

After about a week in the shell and growing a bit – showing already some body pattern – they can be transferred to a small tank.

**Literature:**

Evers (2005): Ein Traum wurde wahr: die Nachzucht des Parallelstreifen-Panzerwelses. Amazonas 1, 44–51

Sunday 18 November 2007

Autumn Auction

Starts at 1300 hrs
at
Highfield Working Men's Club
Ratcliffe Street
Darwen
Lanc's

Booking in from 1030 hrs on the day
Pre-book by telephone on 01942 248130

Canteen

Tea, coffee, cold drinks, hot food, sandwiches, cakes.

Rules:
Items for the fishkeeping hobby only.
All Electrical Goods must have a Name and Telephone number on them, together with the condition of the item i.e. Spares, Working Order, Faulty etc.
All plants and fish to be auctioned should be in clear plastic bags, or jars large enough for them. Large fish may be offered in plastic containers/buckets. Fish should be identified (Common or Latin names). 'Painted' fish will not be auctioned.
There is a 15% commission to the Catfish Study Group on all sales. Payments to vendors will be made at the interval or at the end of the Auction.

The CSG is in no position to accept responsibility for the condition of any item sold at the auction or to exchange any item purchased. If in doubt, bid for an item 'as seen'. The vendor's name will be available to the purchaser, in the event of a problem, on the day only.
Catfish Study Group
New meeting place starting 20th November 2005

Highfields Working Men's Club
Ratcliffe Street,
Darwen,
Lanc's

DARWEN

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