8-Foot Giant Catfish Caught in Cambodia

Constantine Samuel Rafinesque

Clarias gariepinus

Fluke problems in catfish

BAP Spawning Records

Synodontis schoutedeni spawned!

Volume 8 Issue Number 4
December 2007
Although this journal is out on time, it is not complete because I received some articles on Friday and Saturday for the December issue which was to be finished in time for the Sunday meeting. I do have another life, therefore some eight pages of the Breeders reports will not be published until the next issue.

I also understand that there is a name change to one of the Information Sheets that goes out with this journal but that information came to me on Friday after they had all been printed. I won't get the full info now until he returns from Norway. The correct name will be announced in the next journal.

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We are almost at the end of another very successful CSG year, during which we have broken several records. Membership has risen, show entries increased and most importantly our auctions are producing excellent results in both profit and the variety and quality of fish being sold.

As you will have noticed by the lateness of some issues, we have had a few problems getting Cat Chat to you on time but part of the blame for this must also rest on your shoulders, because without your input there is very little to publish. Having said this, the Breeders Award Programme is coming to the end of the first session of completed spawning logs and we have started to getting final breeding reports. This in turn means that there will be more content available for the magazine.

This does not mean that the pressure is off and you can all just sit back and wait to read these reports, oh no! I will still be chasing you for your input and views.

If you have any moans and groans about what we are, or are not doing, let us have it, it’s the only way we get to know your feelings. A moan or complaint at a function is all well and good but often gets forgotten, not because we want to avoid the problem but usually because we are so busy at the time it does not register or get noted, well with me anyway. So write to the editor with your views.

We would also like to see many more of you at the AGM in January and no, you won’t necessarily be roped into a job you don’t really want to do but it is the best time and place to say your piece.

The Convention is also rapidly approaching, 15th - 17th February 2008 and with the arrangements finalised it just remains for you all to book your tickets. This should be done through the Secretary, Adrian, and don’t forget if you leave it until after the 1st of February you will it will cost you a little more for your ticket.

The convention promises to be the best yet, but for that to happen it needs members to be a part of it, so ‘Don’t delay buy your ticket today’.

There will not be an auction at the convention but we are allowing a “Bring and Buy”. However, to avoid it getting out of hand and to keep within the bounds of the law there are restrictions.

1. Only fish bred by persons attending the whole event (Two day ticket).
2. Fish to be registered with the B&B manager Bob Barnes, on Saturday morning before the start of the event. There are NO exceptions to this rule.
3. Fish to be adequately bagged or they will be refused.
4. A full list of the fish being offered with prices should be displayed clearly on each box and also on a card to be displayed on the B&B notice board.
5. To avoid unnecessary stress the fish will not be openly displayed, but can be viewed on request.
6. Sales can only be made during break times or at the beginning and end of each day.
7. All fish are the responsibility of their owners and the CSG cannot be held responsible for any losses.
8. Members or guests can if they wish set up small holding facilities for their fish in their rooms and present them for sale on each day.

Members may of course exchange fishes privately during the event, but this will be outside of CSG jurisdiction and therefore any involvement if there are any disputes resulting from private sales.

This year’s emblem if you have not already seen from the advertising banner is the ‘Black lancer’ Bagrichthys macracanthus. Badges have already been produced and are available on the web site or directly through Adrian.

As I have already mentioned the Breeders Award Programme is well under way, with the few participants so far accumulating points quite rapidly. The only disappointment so far is that there are not very many of our overseas members taking part. This is not a competition where you are trying to beat another member to a point’s total; it is purely individual with everyone aiming for the same goal ‘Gold’ (2,000 points). The design of the Pendant/Brooch is well under way and we will shortly be having a prototype made. If you are breeding any catfishes at all register for the scheme and get on the ladder to gold.

Because of ever increasing postal charges, which is why the membership fees have been increased, we have been giving serious thought to offering the magazine electronically, that is to say having your Cat Chat and information sheets in PDF format. The will of course incur a lower membership fee, which as yet we have not set, but if there are any of you who would prefer to pay a lower membership fee and have your magazine and information sheets electronically please let me know.

Finally it just remains for me to wish you all a Merry Christmas and very successful catfish new year.
Flukes are important parasites of aquarium and pond fish. Several species of fluke are known to affect both wild and captive catfish, causing health problems and sometimes high mortalities. In this article, we look at the biology and transmission of these parasites and consider prevention and treatment strategies.

What are flukes?
Flukes belong to the group of primitive, multi-celled organisms known as flatworms. There are hundreds of fluke species, including some that are parasites of fish. The two main groups of flukes are the monogeneans and the digeneans. Of these, the monogeneans, which include the notorious skin and gill flukes, pose the greatest health risk to fish.

Monogenean flukes (skin and gill flukes)
These are mostly ecto-parasites – meaning they live on the fish's body surfaces rather than inside. They typically have a contractile, flattish or maggot-shaped body, and reach between c. 0.2 and 2 mm in length, the actual size depending on the species. Their small size and semi-translucent appearance makes monogeneans difficult to detect with the naked eye.

The skin-dwelling species belong to the genus Gyrodactylus, whereas those associated with the fish's gills belong to the genus Dactylogyrus (yes, it's a confusing pair of names!). Needless to say, biology is never clear cut, such that some Gyrodactylus affect both the skin and gills – hence the location of the fluke on its host’s body is not a reliable indicator of its identity. Incidentally, there are other genera of monogeneans that parasitize the body surfaces of fish but we won't dwell on their taxonomy here.

The fluke life cycle
The life-cycle is relatively simple, involving only fish (as compared with some other worm parasites that must pass through an invertebrate host, such as a Tubifex worm or copepod, in order to complete each generation). The adult flukes are hermaphroditic – i.e. each individual possesses both male and female reproductive systems.

Gyrodactylus skin flukes are live-bearers. The newborn young tend to remain attached to the fish, although some are carried off into the water where they may encounter another fish host. Transmission from fish to fish is generally by direct contact.

Dactylogyrus gill flukes are egg-layers. They release their eggs which drop to the bottom of the aquarium where they hatch into microscopic free-swimming larvae. The larvae have a limited time (few hours) in which to find a host, otherwise they die. On locating a suitable fish they attach to the gills where they mature and eventually lay eggs to repeat the cycle. The time taken for the eggs to hatch and the larvae to mature varies according to the species of fluke and the water temperature.

By understanding something of the fluke's life cycle, we can appreciate why skin flukes are more "infectious" under high stocking densities, given the increased likelihood for occasional contact between fish, enabling the flukes to "swing" from one host to another. Those fish that congregate in tight shoals, such as Corydoras, provide similar transmission opportunities. In the case of gill flukes, the newly hatched flukes that emerge from the substrate will infect the first suitable host they encounter – this of course, might well be a substrate-dwelling species, such as a catfish or loach. We might infer that catfishes get more than their fare share of flukes, but interestingly Ian Fuller is of the opinion that Corydoras are somewhat resilient to fluke infestations – so maybe some catfishes have evolved defence mechanisms against these wormy invaders? Ian further speculates whether corys might have some parasite-defence mechanism, such as the toxin they release from their gills when stressed. It would be very interesting to look for anti-parasite activity within this gill secretion – you never know, it could hold the key to a new parasite treatment!

How flukes enter the aquarium
Generally, monogenean flukes are brought in on infected fish or in their transport water. Fish that harbour just a few flukes on their skin and/or gills may show no obvious symptoms, hence their parasite cargo may go undetected. Needless to say, it pays to always quarantine new stock, regardless of whether the fish were wild caught or captive bred.

Wild-harvested live foods (e.g. pond collected Daphnia) are another possible source of flukes, given that several monogeneans are found naturally in British fishes. The flukes won't be living inside these aquatic invertebrates, but could be lurking within the water that they are collected in. Rinsing such live foods in a fine-mesh net...
before feeding will help reduce the risk of introducing flukes into the aquarium.

Fluke damage

Monogenean flukes possess attachment hooks that rasp and damage the fish's delicate skin or gills. The damaged tissue is prone to secondary infections involving bacteria and/or protozoa. Hence, in some cases the catfish may have a mixed infection, with the various pathogens “acting together” to compound the damage. Fluke damage to the gills impairs the various functions of these “multi-tasking” organs, causing the fish to experience problems in respiration, osmoregulation, and excretion.

Signs of a fluke problem

Monogenean flukes are too small to be easily seen with the naked eye, so you have to look for physical and behavioural changes in your catfish that could indicate a fluke problem. As mentioned earlier, very mild infestations may cause no obvious symptoms, but if the fluke numbers subsequently proliferate, then this can spell trouble. Always deal with a fluke problem, however mild.

Skin flukes

These irritate the fish and may cause it to repeated­ly flash (rub its flanks against submerged objects), or flick its fins. (However, Ian Fuller informs me that fluke-infested Corydoras don't flash or fin-flick that much). Affected fish may go off their food and in severe cases perform “nervous” darting move­ments. Fluke-infested areas of the skin may be­come cloudy, even reddened, and if the fins are involved these may fray and erode.

Gill flukes

Gill flukes may cause the fish to develop breathing difficulties, manifesting as rapid gill beats. The gill covers may be slightly flarey.

Of course, these outward signs are not diagnostic of flukes, so you must rule out other possible causes before reaching for the fluke remedy.

What to do if you suspect flukes

Unless you have confirmed flukes by microscopy (see later), bear in mind that it may not be a fluke problem at all! Rule out other possible causes for the symptoms. Perform water tests (notably check ammonia, nitrite and pH) and consider whether your catfish may in fact be suffering from parasitic protozoa (e.g. Trichodina) rather than flukes. Of course, it is possible that your catfish has a mixed fluke-protozoal infection, and it might even have a bacterial infection as well.

Action plan

1) If the catfish seem to have breathing difficulties, then increase aeration.
2) If you aren't sure whether you are dealing with flukes or protozoa (or both), then consider treating the fish with a general parasite cure that will help combat both these groups of parasites. See list of treatments, below.
3) In general, treat the fish in situ in the aquarium. This is necessary to destroy any free-living stages in the water or substrate.
4) Fluke problems can be stubborn to eliminate, so you may require more specific drugs.
5) When dealing with gill flukes, bear in mind that their eggs are resilient to chemical attack. Hence, one or more repeat treatments are generally necessary to destroy the juvenile flukes as they hatch.
6) Check for signs of secondary bacterial infections, and treat accordingly. (The API product, Melafix®, both aids tissue repair and combats bacteria. There is evidence that Melafix® may also have anti-fluke properties, although don't rely on this product as your only fluke-treatment).

Suitable chemical treatments

The list below is not exhaustive. The dosages are for guidance only and in some cases may need to be varied according to the purity of the product used. New regulations concerning the sale of fish medications means that some drugs that were previously prescription-only (i.e. from a vet) are now legally available in the UK without prescription.

Bear in mind that fish vary in their tolerance to drugs, with scale-less species being particularly sensitive. If in doubt, seek advice regarding drugs (and dosages) that are suitable for the types of fish you plan to treat. I accept no responsibility!

Chemical Comments

Formalin Also has anti-protozoal activity. Quite harsh so use with care. More toxic to fish under soft and acid conditions. Widely available under various brand names.

Chloramine-T Also has anti-bacterial and anti-protozoal activity. Can be quite toxic to fish. Toxicity is greater under soft and acid conditions. Actual dosage therefore depends on pH and hardness value – seek advice.

Mebendazole Safer than formalin and chloramine. Does not kill protozoans. Suggested dose: 1 milligram per litre, 24 hour bath.
CAI' CHAI' Praziquantel  Safer than formalin and chloramine. Does not kill protozoans. Suggested dose (Option 1): 2-10 milligrams per litre as a short term bath (to 4 h); repeat after 7 days. (Option 2): 2 milligrams per litre as a prolonged bath. Prescription only?

Below is some additional information which may be of interest.

Why are only some of my catfish affected by flukes?

If a fluke outbreak occurs, you may find that some fish remain unaffected, or that some are far more severely infested than others.

Host specificity of monogenean flukes

This difference might in part be due to the parasite's "host specificity"; by this, we mean the range of (fish) species that it normally infects. Some fish parasites, such as the infamous whitespot parasite (*Ichthyophthirius*; a protozoan) have a very "broad" host range, being capable of infecting virtually any freshwater fish. In contrast, many monogeneans have a very "narrow" host range, in some cases the fluke being restricted to a single fish species. Under aquarium conditions, however, where many different (and often geographically diverse) fish are kept in close proximity, some parasites (including some flukes) may be able to infect species that they wouldn't normally touch (or ever encounter) in the wild. Hence, if you do encounter a fluke problem in your catfish, don't be surprised if these parasites "jump" to other catfish species, and possibly even other types of fish - it pays to prepare for the worst scenario.

Acquired immunity

Even within a fish species, some individuals will sustain more flukes than others. Those fish with few (or no) flukes may have developed some level of protection to these parasites, due to a previous fluke infestation having super-charged their immune systems.

Monogeneans under the microscope

In most cases, the only way to be absolutely certain that you are dealing with a fluke problem is to examine a sample of the affected host tissue (e.g. skin scrape) under the microscope. Flukes can be seen under low power (about 80 x magnification). Look for signs of activity: flukes tend to crawl and move by stretching and retracting movements of the body. Or they may make probing movements. With a little practice and the aid of an illustrated reference book, you should be able to distinguish between *Gyrodactylus* and *Dactylogyrus* flukes. Both possess hooks but those of *Gyrodactylus* are situated within a serrated disk-like region known as the opishaptor (despite its head-like appearance, the opishaptor is the rear end of the parasite!). In the case of *Dactylogyrus*, the hooks are terminal and there is no opishaptor. Scan towards the head end of *Dactylogyrus* and you may see a group of four black eye spots - these are absent in *Gyrodactylus*. And if you look carefully at a *Gyrodactylus* fluke you may detect the hooks of a developing embryo inside. Amazingly, you may discover that this embryo is itself carrying a hooked embryo inside! *Gyrodactylus* have been likened to a set of "Russian Doll" toys - one inside the other!

Monogeneans on wild catfishes

Many new monogenean species are discovered each year, some having been described from wild *Corydoras* and other wild catfishes. For example, *Gyrodactylus anisopharynx* and *Gyrodactylus samirae* were described in 2000 from wild *Corydoras paleatus* and *C. ehrhardtii* (collected from the Rio Piracuara, Southern Brazil). A third gyrodactylid, *G. superbus*, was described in 1973 from wild *C. paleatus*. As for other catfish hosts, several monogeneans of the genus *Cornudiscoides* have been described from the gills of *Mystus nigriceps*; and *Gyrodactylus groschalti* from the gills of *Clarias lazera*. Another fluke that parasitizes *Clarias lazera* is *Paraquadriacanthus nasalis* which was discovered inside its host's nostrils! (I wonder if it made the catfish sneeze?).

In all likelihood, many (if not all) wild catfishes serve as hosts to one or more monogenean species. So far, the very limited parasitological studies have provided just a glimpse of the natural fluke fauna of these fascinating fish.
In the second part of our series on non-native, invasive catfish species, we look at a grossly underrated threat, the African sharptooth catfish *Clarias gariepinus*. This species of clarid catfish has an almost Pan-African natural distribution, being absent only from absent from Maghreb, the upper and lower Guinea and the Cape province and probably also Nogal province. It is also known naturally from parts of Asia Minor (Israel, Syria and southern Turkey). *Clarias gariepinus* can be considered one of the most important tropical catfish species for aquaculture, its chief features for its popularity being the ease of culture, rapid growth and the large size it is capable of attaining (up to 1.7 m TL). In many areas where other native *Clarias* species can be found (e.g. tropical Asia), the large size and rapid growth rate favours it over the native species (e.g. tropical Asian clarids typically reach only 30–40 cm and take a longer time to do so). Even in parts of Africa where this species is not known to occur natively (e.g. in Cameroon), *C. gariepinus* has been introduced as a cultured food fish. Sharptooth catfish are voracious predators, being known to feed on smaller fishes (although they are not picky eaters and have been known to feed on planktonic organisms). They are even known to undertake pack hunting in small groups: in Lake Kariba, *Clarias gariepinus* have been observed to congregate in a tightly-knit sickle-shaped formation along shallow, gently sloping sandy beaches and in sparsely vegetated marginal pools. These catfish swim slowly inshore near the water surface with their mouths open, herding shoals of small cichlids. At a depth of 5–10 cm, the catfish suddenly close their mouths with a loud noise, open them again and swim forwards with the mouth wide open and partly above the water surface. This causes the prey fish to panic and jump in all directions. The catfish move slowly inshore, opening and closing their mouths in unison. The prey are eventually encircled into a dense panic-stricken mass and are readily captured by the catfish. After eating or dispersing all the prey, the catfish submerge and swim along the shore before reforming as a pack and swimming inshore as a group again.

Because it has been widely introduced in many places, is such an aggressive predator, and is widely tolerant of different water conditions, the sharptooth catfish is an underestimated threat to native fish biodiversity worldwide. It is perhaps most disturbing to find that this species has now been reported from Brazilian rivers in Minas Gerais and Paraná states (where they have apparently escaped from recreational fishing ponds). This represents the only exotic catfish species originating outside of South America known to be on the loose in Brazil, and the threat this voracious and rapid-growing predator can pose on the rich diversity of freshwater fishes there is unimaginable. In Asia, the catfish are very much capable of successfully outcompeting native *Clarias*, as they grow much larger and faster, and studies have shown that they successfully outcompete Asian *Clarias* in feeding interactions (as the sharptooth catfish feeds both night and day, while Asian species only feed at night). It is perhaps ironic to consider that the Asian walking catfish, *Clarias batrachus*, is considered one of the top 100 worst invasive species in the world, but that the sharptooth catfish (whose threat as an invasive species has been hardly documented) presents a real and potent threat to displacing *Clarias batrachus* in its native range.
Constantine Samuel Rafinesque (1783-1840)
A small insight by A W Taylor.

Constantine Samuel Rafinesque-Schmaltz to give him his full name was born on the 22nd October 1783 in Galata, a suburb of Istanbul, Turkey. His father was a French merchant from Marseilles and his mother, although born in Istanbul, was of German descent. Rafinesque spent most of his youth in Marseilles, and was studious pupil who by the time he was twelve had a good command of Latin and had begun to collect plants.

At the age of nineteen Rafinesque travelled to America, where he became friends of the young botanists there; three years he later returned to Europe and settled in Sicily; where he worked for a short time as a secretary to the American consulate and as a merchant trader. At the remarkable young age of twenty-five, Rafinesque had earned himself a considerable fortune, which enabled him to retire; as a result of which, he devoted all his time to the study of natural history, studying plants and fishes, describing and naming quite a few. After the death of his son in 1815 Rafinesque left his common law wife and moved to America, unfortunately the ship he was sailing on; the 'Union' sank, taking with it 50 boxes of books and specimens belonging to him, to the murky depths near the Connecticut coast; but by 1818 he had managed to build his new plant and animal collection up to 250 new species. A year later Rafinesque was appointed professor of Botany at the Transylvania University, Lexington, Kentucky, and almost immediately started to increase his collection, describing and cataloguing new species of plants and animals that he found whilst wandering through the state in his spare time, including the Black Bullhead; *Ameiurus melas*. Controversy though was never far behind him, and his book *Florula Ludovicana* drawing much criticism and condemnation from his fellow botanists, with the result that his writings were ignored and he was labelled an erratic student of plants. After an argument with Horace Holley the University president in the spring of 1826, Rafinesque left his position, but not before placing a curse on the University. Shortly afterwards the president died from 'Yellow fever' and the main building of the university was destroyed by fire.

Rafinesque moved to Philadelphia were although unemployed used his considerable wealth to give public lectures and to have his works published. However, in the books he published between 1836 and 1838 where he proposed names for hundreds of new species, his fellow scientists rejected most of them. Controversy surrounded Rafinesque for the rest of his life, with most of his work being labelled the work of an eccentric and sometimes being considered on the verge of insanity.

Constantine Samuel Rafinesque-Schmaltz died on September 18th 1840 from stomach cancer. His considerable collections were destroyed or sold as jumble. In March 1924 his remains were exhumed and re-buried in a tomb at the Transylvania University, Lexington; where the words "Honor to whom honor is overdue." Were inscribed for all time.

PHOTOGRAPHIC COMPETITION

The CSG wish to produce its own calendar for 2009 and have decided to have a photographic competition. Members of all ages are invited to enter their photographs in the competition which should be catfish orientated in a portrait, spawning embrace, pairs or group or humorous situations.

"Please no Photoshop".

The committee will decide the best twelve pictures for the calendar.

The winning photographers will each receive a free 2009 badge and calendar.

Please e-mail your images (.jpg preferred) with your name and membership number to <secretary@catfishstudygroup.org> Closing date for entries is 31st July 2008.

(Please note that the CSG retain the right to use all submitted images for future CSG promotions, journals and/or fact sheets).
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Meet the member
Alan Vassiere Member 69

This is my second time as a member of the CSG. I was born in Liverpool sometime in the distant past. I now live in Rainhill (the village, not the loony bin), St Helens.

At an early age I, along with thousands of others, was evacuated to Wales during the war. This is where my fascination with all things watery began. So much was my obsession that it was on more than one occasion that I was retrieved from some pond or ditch. On my return to Liverpool after the war, my interest remained and I still went back to Wales most summers to continue my watery education.

My first breeding experience was with sticklebacks on the windowsill in the back yard and I was hooked.

I had to wait until 1952 before I could afford my first proper aquarium, a second hand 24 x 12 x 12 complete with all the kit for tropical fish, so I was up and running. I was working at the time and you would believe that I was receiving pocket money. Oh how things have changed!

My fascination with tropical fish has continued to this day, except for a couple of breaks when I got called up to serve queen and country and again when I married and started my own breeding programme, just to keep the family genes going.

I probably started serious fish breeding in the early 60's and to date have had some 278 species breed. My main interests have been Barbs, Characins and Rasboras but because of various breeding schemes, I have successfully had other families breeding as well.

I designed and introduced the Merseyside Breeding Scheme around 1974 - 1975 which I believe was the inspiration for the FNAS scheme introduced around 1979, of which I am the scheme officer. I was successful in both schemes which I achieved in the minimum time. I also designed and introduced the Breeders Scheme to Preston Aquarist Society about three years ago and this is well supported.

I am the first, and to date, the only member of a breeders scheme to achieve 1000 points and this took me just over 8 years and 186 separate successful spawnings, all of which were seen at club meetings or shows.

In the last few years I have become hooked on Corydoras and half my room is dedicated to this species. I currently have 22 species and have bred 30 species along with 10 Aspidoras.

I was recently interviewed by Hans Georg Evers for the German magazine Amazonas and this item was published in the November magazine.

I have attended a few CSG Conventions and stayed for the weekend at the last two. I have met quite few of you and enjoyed your company. I'm looking forward to the next one in February next year and I hope to meet some more new fish nuts then.

There is a rumour that old Vass likes a beer or a scotch and there may be an element of truth in this. Believe me I have learned much more standing at the bar with fellow aquarists than many of the talks I have listened to over the years. Some speakers also agree with this. Anyway, like I said, a few beers does no harm, it's the bloody fresh air that's the problem.

Honestly though, I have met many good people through this wonderful hobby of ours and now have friends all over GB and overseas. The Convention and the Show that the CSG organise annually help to strengthen these friendships, so well done guys, keep up the good work.

Ed: Sorry about the picture Alan, it's the only one I have of you and this was taken at last years convention.
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November 19, 2007—Captured just before midnight on November 13 by fishers in Cambodia, this Mekong giant catfish is 8 feet long (2.4 meters long) and weighs 450 pounds (204 kilograms).

"This is the only giant catfish that has been caught this year so far, making it the worst year on record for catch of giant fish species," said Zeb Hogan (far right), a fisheries biologist at the University of Reno in Nevada. After collecting data on the fish, Hogan released it unharmed.

Giant catfish were once plentiful throughout Southeast Asia's Mekong River watershed, including the Tonle Sap River—home of the fish in these exclusive pictures taken near Phnom Penh.

But in the last century the Mekong giant catfish population has declined by 95 to 99 percent, scientists say. Only a few hundred adult giant catfish may remain. Since 2000 five to ten fish have been caught by accident each year throughout the Mekong area.

Earlier this year Hogan, a National Geographic "emerging explorer," launched the three-year Megafishes Project to document the world's giant freshwater fish. The project is funded in part by the National Geographic Conservation Trust and Expeditions Council. (National Geographic News is owned by the National Geographic Society.)

Stefan Lovgren

Same fish from the other end

Biologist Zeb Hogan holds the tail of a Mekong giant catfish captured and released on November 13, 2007, in the Tonle Sap River in Cambodia.

At the time of the catch, Hogan was monitoring the start of the monthlong bag net fishery, which uses large baglike nets tethered to shore. Some three dozen species are harvested—the occasional giant catfish is generally caught by accident.
9th Annual Convention
15th - 17th February 2008
at
The Britannia Hotel
Almond Brook Road,
Standish, Wigan,
Lancashire. WN6 0SR
Tel: 01257 499988
http://www.britanniahotellwigan.co.uk/

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 years 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:
Ian Fuller – Chairman
chairman@catfishstudygroup.org
Adrian Taylor - Secretary
secretary@catfishstudygroup.org
Two pair of adult, six-inch fish was added to the "spawning tank" on August 22, 2007. I sort of laugh to myself when I say "spawning tank" because the tank is set up as a display tank in my living room and was not set up with breeding intentions for any fish! The tank is a standard seventy-five gallon tank, 48"x 18"x 20" (122 cm x 46 cm x 51 cm), complete with an under-gravel filter with a two and a half inch thick gravel bed, decorative rock, plastic plants and an over head twin-tube fluorescent light fixture. The adults were noticeably active in the tank as soon as they were introduced. Their tank mates were a group of twenty assorted larger Danios that were added only a week before at the time of the tanks initial set up.

Their diet consists of live black worms (a Tubifex type worm), frozen mosquito larvae, bloodworms, plankton and a wide range of flake and pellet foods.

The day after they were introduced, they were seen in their normal courting behaviour during mid afternoon. The adults I have are actually F1 fish that I received about six years ago from a fellow hobbyist, Sallie Boggs, here in Pittsburgh. I believe she was the first to have spawned them in captivity. I have had several spawns in the past and witnessed their courting behaviour several times over this period. In courting, they actively chase each other around.

After a period, anywhere from ten to thirty minutes, a pair will end up in the traditional "T" position, such that would commonly been seen with many Corydoras species. The male firmly wraps his body around the entire head of the female. Since Synodontis lack scales, you can actually see the ripples of his body (skin) gripping the females head very tight! She aggressively drives into his body several times and then begins to shake from left to right. After a long thirty seconds or so, they break apart and swim off. Within minutes they are back to chasing one another around the tank and sometimes will repeat the courting but not always.

This same courting activity was seen the following evening on August 24. I have never seen eggs deposited during this activity or anytime soon after. Not thinking much of having a successful spawn in a community set up, especially with the active Danios present, I did not get too excited about the courting.

However, four days later, on August 28, when the regular water change was due, I decided to use a siphon gravel washer and a white bucket to see, if by luck, I might find a fry or two that survived in the event they had spawned.

As I started the siphon and dipped the gravel washer into the gravel in the front of the tank, I was shocked to see a few tiny light colored fry fighting against the current of the siphon. I continued gravel washing across the front of the tank until I had filled the bucket up half way. In the bucket, I found about twenty fry! I decided
to try the gravel washer in the back of the tank and behind some of the decorations. My eyes could not believe what I saw. Hundreds of fry were sucked up and into the bucket. I repeated this about eight times with similar results each time. Finally, I decided that I had enough fry, hard to believe that I could think that, but what was I going to do with over a thousand fry!

The water conditions in the spawning tank at the time of the siphoning were as follows, pH 7.8, KH 3, dGH 9. Temperature 77°F (25°C) and no salt added.

I split up all the fry into eleven different tanks ranging from half-gallon plastic shoeboxes to ten-gallon tanks. Some were added in with other small fry of various species such as Danios, Corys, Rasboras and Rainbowfish. Within three days, most of the fry had vanished in all of the tanks! I had experienced this same problem every time with past spawning attempts. Usually by day three, the fry die off and their small bodies simply dissolve for an unknown reason. In this instance I was fortunate. After two weeks I'd found that a few fry had survived in a two and a half gallon tank with some Danio fry, several fry made it with some Rasbora fry, also in a two and a half gallon tank and about twenty were in a ten-gallon tank with Danio fry. Diet for the fry included microworms, live baby brine shrimp and assorted powdered foods.

What I observed with this batch of fry has lead me to a reasonable conclusion about the difficulty of raising the fry. The fry, even when small, like to hide (as do the adults when they are not courting). When they are disturbed, they swim in an aimless frenzy around the tank, crashing into whatever gets in front of them. In a lighted environment, they don't eagerly come out to feed when food is offered, even if it is live baby brine shrimp. Most of the surviving fry were in a ten-gallon tank located in an area of low light containing a sunken yarn mop where they liked to hide. Polluted with debris, plant matter and mulm the mop made feeding easy for them. In addition, I would guess that they become more active at night. If they move around at night as they do in the daylight when they are disturbed, they use up a lot of energy, and use it fast. This means that they require a lot of food and that food needs to get to them so they do not have to search for it and burn massive amounts of energy that is vitally important for growth in their early age.

Color and faint markings can be seen on fry only a few days old and becomes more noticeable within two weeks. The fry grow quickly for the first couple of weeks, but at a very uneven growth rate.

By four weeks of age, I even wonder if cannibalization occurs amongst siblings! At two months of age, the youngsters appear as miniatures to the adult fish. Just like puppies...as cute as can be!

ERIC BODROCK, November 2007
This article presents sightings and abstracts for four scientific papers for which further details are available.

Catfish sightings: Following on from the list of not-unusual or new species available in the hobby, the following have been sighted: Hemiloricaria lanceolata, Hisonotus leucofrenatus (black otocinclus), Corydoras oiapoquensis, C. condiscipulus, C. robustus, C. julii, C. 'CW 019', C. 'CW 026', Amblydoras hancockii

Selected scientific papers:

Sarmento-Soares LM, Martins-Pinheiro RF etal (2006) – A new Microglanis species, M. pataxo, has been discovered in the Southern Bahia coastal rivers of south-eastern Brazil. A key is also presented, for the three species (pataxo, parahybae and nigripinnis) inhabiting the coastal drainage of the area.

Ortego-Lara A and P Lehmann (2006) – A new genus has been described following the discovery of a new catfish in Columbia. Cruciglanis pacifici is a member of the pseudopimelodidae, but its bone structure is unlike that of any other members of the family.

Vari RP and CJ Ferraris (2006) – A study of the genus Tetranematichthys has identified a second species, T. wallacei. The genus comprises two sexually dimorphic auchenipterid driftwood catfishes, wallacei and T. quadrifilis. The distinction between the species is based on morphological differences to the head and body length measurements.

Ng, HH (2006) – Finally, another new species of sisoroid catfish, Pseudolaguvia ferula has been recorded form the Brahmaputra river drainage in India. P. ferula is unusual in the genus in that it has a round and tapering, rather than a depressed, head. The species gets its name from the Latin word for 'rod' as the head is considerably narrower than other erithistids in the genus.

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.
Breeders Award Programme
Third Quarter Review 2007/08

The Breeders Award Programme (BAP) was launched on March 1st, 2007. The programme encourages CSG members to log and submit breeding reports against successful catfish spawnings.

In the third quarter, another 15 species were bred by CSG members, bringing the total registered spawnings to 63 this year. The table below includes some rarely encountered species, first time spawnings and the first reports from CSG members outside the U.K.

<table>
<thead>
<tr>
<th>Date</th>
<th>Species</th>
<th>Breeder</th>
</tr>
</thead>
<tbody>
<tr>
<td>25/09/2007</td>
<td>Corydoras similis</td>
<td>Frank Falcone</td>
</tr>
<tr>
<td>26/09/2007</td>
<td>Corydoras duplicareous</td>
<td>Frank Falcone</td>
</tr>
<tr>
<td>27/09/2007</td>
<td>Aspidoras sp. 'C118'</td>
<td>Frank Falcone</td>
</tr>
<tr>
<td>28/09/2007</td>
<td>Corydoras sp. 'CW016'</td>
<td>Frank Falcone</td>
</tr>
<tr>
<td>05/10/2007</td>
<td>Ancistrus triradiatus</td>
<td>Mark Walters</td>
</tr>
<tr>
<td>25/10/2007</td>
<td>Corydoras longipinnis</td>
<td>Eric Bodrock</td>
</tr>
<tr>
<td>26/10/2007</td>
<td>Aspidoras sp. 'C35'</td>
<td>Eric Bodrock</td>
</tr>
<tr>
<td>30/10/2007</td>
<td>Corydoras weitzmani</td>
<td>Eric Bodrock</td>
</tr>
<tr>
<td>02/11/2007</td>
<td>Farlowella mariaelenae</td>
<td>Ian Fuller</td>
</tr>
<tr>
<td>06/11/2007</td>
<td>Ancistrus triradiatus</td>
<td>Ian Fuller</td>
</tr>
<tr>
<td>11/11/2007</td>
<td>Aspidoras sp. 'C118'</td>
<td>Eric Bodrock</td>
</tr>
<tr>
<td>14/11/2007</td>
<td>Corydoras sp. 'C43'</td>
<td>Ian Fuller</td>
</tr>
<tr>
<td>15/11/2007</td>
<td>Corydoras metae</td>
<td>Mark Walters</td>
</tr>
<tr>
<td>18/11/2007</td>
<td>Corydoras boesemani</td>
<td>Eric Bodrock</td>
</tr>
<tr>
<td>19/11/2007</td>
<td>Corydoras gossei</td>
<td>Eric Bodrock</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Points to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ian Fuller</td>
<td>860</td>
</tr>
<tr>
<td>Mark Walters</td>
<td>700</td>
</tr>
<tr>
<td>Adrian Taylor</td>
<td>340</td>
</tr>
<tr>
<td>Dave Penney</td>
<td>40</td>
</tr>
<tr>
<td>Eric Bodrock</td>
<td>40</td>
</tr>
</tbody>
</table>

The addition of points following the submission of stage 4 reports (6 month plus) has added to member's tallies and rewarded two members with qualification for the bronze breeders award! Ian Fuller has scored a massive 860 points, from 17 species and three genera, including a number of first ever reported spawnings. Mark Walters has now registered 11 species and four genera for a total of 700 points to date.

The next challenge for these two members is 1000 points and 6 genera, to achieve a silver award.

There have not been as many completed reports as expected, however and we encourage all members to complete the stage reports after registering their success.

Keep the reports coming, there are plenty more spawnings out there that we know about which are not being recorded.
Species Data Sheet

<table>
<thead>
<tr>
<th>Species name:</th>
<th>Corydoras duplicareus</th>
<th>Spawning date: 23-3-07</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of Adults:</td>
<td>Males 3</td>
<td>Females 2</td>
</tr>
<tr>
<td>Age: (If known)</td>
<td>Size of males 37 mm SL</td>
<td>Size of females 43 mm SL</td>
</tr>
<tr>
<td>Water parameters:</td>
<td>Temp 80°F, KH1, pH 6.8</td>
<td>µS cm 320 ppm</td>
</tr>
<tr>
<td>Aquarium Size:</td>
<td>W 40 cm x H 35 cm x D 45 cm</td>
<td></td>
</tr>
<tr>
<td>Substrate:</td>
<td>Sand</td>
<td></td>
</tr>
<tr>
<td>Filtration:</td>
<td>2 internal sponge filters</td>
<td></td>
</tr>
<tr>
<td>Furnishings:</td>
<td>2 Large clumps of Java moss and large clump of fern.</td>
<td></td>
</tr>
<tr>
<td>Breeding details:</td>
<td>No of fish involved: Males 3 Females 2</td>
<td></td>
</tr>
<tr>
<td>Courtship activity:</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Spawning activity:</td>
<td>Corydoras duplicareus spawn in typical the Corydoras 'T' mating clinch. The females did not seem to be selective of partners and appeared to mate with whichever male was the most persistent, this was difficult to see owing to the density of the Java moss.</td>
<td></td>
</tr>
<tr>
<td>Eggs:</td>
<td>Number laid: 15 Laid at a time: 1 to 2 Hatch time: 4 days Fertility: 80%</td>
<td></td>
</tr>
<tr>
<td>Egg Size: 2.7 mm diameter. Egg colour: Very light amber Time to free swimming: 2 days after hatching. Hatch rate 70%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sunday 16 March 2008

Spring 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,
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would like to thank all our **Convention** sponsors for their valued support.
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