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The Journal of the Catfish Study Group (UK)

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Dear Members

Thanks to W Nimmo for his kind praise of the Committee. It's nice to know that our work is not in vain.

Rob Boardman has come up with a good idea to support the Group. He has pointed out that we should be studying catfish - our name - but we have been remiss in doing just this. An item about this is on page 5. You don't even have to write an article. You can e-mail Rob with a snippet and he will do the rest.

Once again we had a great Convention which was well attended by our keen members and people from other fish clubs. I must apologise for the quarterly forecast of meetings which, due to computer/e-mail problems, did not get to me in time to be included. I believe a loose note will be included with this journal. We have some good stuff coming.

Ed

Articles and pictures can be sent by e-mail direct to <**bill@catfish.co.uk**> or by post to

Bill Hurst 18 Three Pools Crossens SOUTHPORT PR9 8RA (England)

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Honorary Committee For the Catfish Study Group (UK)

2003

PRESIDENT Trevor (JT) Morris

VICE PRESIDENT Dr Peter Burgess PJBurgess@compuserve.com

> CHAIRMAN Ian Fuller ian@corycats.com

VICE CHAIRMAN Danny Blundell DANNY.BLUNDELL@care4free.net

> SECRETARY Temporarily Ian Fuller

TREASURER Temporarily: Danny Blundell DANNY.BLUNDELL@care4free.net

MEMBERSHIP SECRETARY Julian Dignal jools@planetcatfish.com

SHOW SECRETARY Brian Walsh g.b.w@brianwalsh1.freeserve.co.uk

Assistant show secretary Ann Blundell AUCTION ORGANISERS Roy & Dave Barton

FUNCTIONS MANAGER Trevor Morris

SOCIAL SECRETARY Terry Ward

WEB SITE MANAGERS Allan James allan@scotcat.com

> COMMITTEE MEMBERS Peter Liptrot bolnathist@gn.apc.org

Steve Pritchard S.Pritchard@btinternet.com

CATERING DEPARTMENT Mr & Mrs Morris and Mr & Mrs Ward

> **CAT CHAT EDITOR** Bill Hurst bhurst@catfish.co.uk

DISTRIBUTION Ann & Danny Blundell

SCIENTIFIC ADVISER Isaäc Isbrücker

cat chat

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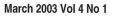
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From the Chair





Here we are well into the start of another year and I'm convinced someone's making them ever shorter; they seem to be flicking by like the pages of a book.

The final meeting of 2002 in December was the traditional 'Hot Pot' and general forum. I like this one because it's free.

In January it was the meeting that everyone loves to hate, the AGM. There were a few changes to the committee and these can be seen on page 1 of this issue

The highlight of the CSG (UK) year comes in February when we hold our Annual Convention. Because of the dramatic rise in charges for the Lowton Civic Hall, which we used for the past four years, we decided to move the convention to a new venue, Standish High School. Our guest speakers for the event, the German duo Hans-Georg Evers and Ingo Seidel, gave us three excellent talks.

After one of Brian Walsh's superb and now infamous audio visual, Ingo started by giving us an insight into the world of the 'Whiptail catfish' showing slides of many species, explaining some of the techniques needed to keep them at their best and in many cases breed them. After the lunch break both speakers combined and gave a joint presentation and discus a little more generally the so-called 'L' numbers, again backed up with superb slides. Because of a tight time schedule Ingo had to leave for the airport.

The third and final talk was from Hans-Georg who explained the need for creating the now well known 'C' number codes. He then proceeded to clarify some of them with the aid of even more super slides. Needless to say I was most attentive and soaked up the information like a sponge. Like Ingo, Hans-Georg could not stay long to chat because he too needed to be on his way to catch a plane home.

To close the proceedings for another year Brian gave us his final audiovisual.

The only down side of the day was the lack of heating in the hall and for this I would like to apologize. I found out later in the day that heating was available but the caretaker had neglected to put it on until after everyone had arived.

The problem that we now have is to make next year's event even better.

Ian Fuller

Regular Annual Events - Not to be missed



21 September 2003

Autumn Auction

16 November 2003

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YOU CAN'T HURT YOUR FISH AND THAT'S OFFICIAL by Bill Hurst

A recent article in the Angling Times shows that, as a result of extensive research, Professor James D Rose and his team from

the University of Wyoming have reported that fish do not feel pain – and that's official. He apparently discovered that fish do not have the brainpower to feel pain because their brain is far too primitive. He reports that the part of the brain (that indicates pain) used by humans and other warm-blooded creatures, known as the cerebral cortex, is absent in fish.

Although fish wriggle and 'fight' when manhandled or caught on a hook, this reaction is a purely automatic response for protection or survival. For example, if a man hits his thumb with a hammer, the immediate reaction is to pull the hand away and swear because he knows something is wrong and he may suspect damage but it may not hurt until later. An old army joke when someone is injured is "It'll be OK until the pain sets in" and that is usually very true.

Sometimes you can knock yourself and ignore it because there was no feeling at that time but the

following bruise can be quite painful as a result of the painless injury.

Just because a fish can't feel pain does not mean that bad handling cannot cause injury, sometimes with fatal results to the fish. Injury and pain are not related although we, as humans, tend to think that it is because normally if we damage our self, it hurts.

The report does not deal with stress, which is often talked about when aquarists move their fish from one tank to another and the fish fails to respond to its new environment. Stress isn't painful physically but it is still caused by brain reaction to a situation.

Professor Rose's report was in response to the worldwide angling Anti's who are trying to ban people from fishing because of the alleged cruelty caused by the pain that a fish is supposed to feel when it is hooked. I'm quite sure the Anti's will find another way to complain. They really should get a job and upset someone closer to home instead of trying to upset me and my friends who enjoy a good days fishing.

Can I put my fish in your tank please?



A Novice angler set out to catch some cod - and reeled in one of the world's largest and rarest fish.

Val Fletcher hooked an 11ft 7in oarfish, which normally lives at depths of 3000ft in the Mediterranean and Atlantic, off Skinningrove, near Redcar, Cleveland, England, with a squid bait.

Eight stone Val hauled the ten stone monster ashore from the North Sea after a 40 minute struggle.

Oarfish are hardly ever caught alive and are rarely seen even by seasoned fishermen. One of the last recorded catches was off the coast of America seven years ago.

Sadly Val's catch will not go into the record books because it was incorrectly weighed.

From an article by Jeremy Armstrong (Daily Mirror 21 Feb 03)



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A VISIT TO BRUNEI

Heok Hee Ng

We stepped out of the airport to be greeted by the burning sun and the friendly staff of the Brunei Museum. We were there to assist the museum in a two-week survey of the freshwater fish of Brunei. Our examinations had just ended and we thought that this fishing trip would make a good break from our routine.

Our first objective was to survey the upper reaches of the Ingei river. After an hours' drive from Bandar Seri Begawan, we were on the river itself and piled into a boat for the three-hour journey upriver. We promptly reached Kampung Melilas, which was an Iban village somewhere midway up the river. Our party were to stay the night here before proceeding further upriver by boat next morning. We took the opportunity to begin sampling the small streams near the village that drained into the river. The water was tinted brownish and in some of them, one could see Cryptocoryne sp. growing on the stream bed. Our haul consisted of large numbers of the wild fighting fish Betta cf. akarensis, the halfbeak Hemirhamphodon kuekenthali, the snakeheads Channa baramensis and C. lucius, barbs such as Puntius binotatus, and rasboras such as Rasbora cephalotaenia, R. pauciperforata and R. tornieri. We also caught smaller numbers of pikeheads (Luciocephalus pulcher), leaf fishes (Nandus nebulosus) and coolie loaches (Pangio kuhlii). Meanwhile, the village children had done some hook-and-line fishing by the river for dinner and we examined their catch with interest, noting that they had caught large numbers of the catfishes Hemibagrus nemurus, Mystus singaringan and Kryptopterus limpok. Nightfall saw us going back to the streams for another go at fishing and we managed to catch barbs (Puntius johorensis), catfishes (Ompok javnei) and even pipefishes (Doryichthys sp.) which we had not caught during the day. We fell asleep to the call of the tokay geckos, happy with our haul for the day.

Early the next morning, we started preparations for our second leg of the journey. We loaded the boats with our equipment and luggage and slowly chugged our way upstream to the field camp. After spending another morning frying under the sun, we finally reached the field camp, which consisted of nothing more than a few huts by the river. The moment we hit the beach, we were plagued by swarms of sodium-

starved insects, most notably bees and butterflies. This was a mast fruiting year and with the rainforest trees flowering en masse, hordes of pollinators were quick to follow. We soon became used to walking around with swarms of insects as constant companions. No sooner had we unloaded our gear. we were off with the tray net trying to catch more fish. The water of the river was tea-coloured and rather acidic (pH 5.5) and the substrate was a very fine white sand. In fact, one could make out schools of rasboras just by peering into the tea-coloured water in the river in front of the base camp. Besides what we had caught the day before, we also caught the bumblebee catfish Pseudomystus fuscus, the torrent catfish Glyptothorax sp., a second species of coolie loach (Pangio agma), the spiny eel Macrognathus maculatus, and even small giant gouramies (Osphronemus septemfasciatus). One of our Iban guides from the village was an accomplished fisherman and he took the boat downriver to do his own fishing with hook-and-line and gill net. He returned several hours later with several large cyprinids, which included Hampala bimaculata, Barbodes collingwoodi, and Cyclocheilichthys sp. The catch also included several large catfishes, namely Hemibagrus sp., Kryptopterus limpok and K. apogon. We preserved some of the fishes for study and the rest the guides smoked for later consumption. Nightfall came pretty guickly and we were treated to the unique experience of spending the night in the middle of a With fireflies flitting about in the rainforest. understorey, it was a pretty picturesque and tranquil picture.

The next morning, we woke up early for our day ahead, which was expected to be a tiring one. We were to trek through the jungle in order to reach a small stream draining from a hot spring. The trek was to take more than three hours over undulating land. Along the way, we chanced upon the display site of the Argus Pheasant, but sadly, the beautiful bird was not to be seen. By the time we reached the spring, our legs were threatening to give way from under us. Nevertheless, we split up into two teams and began fishing with our nets. The stream was quite small, but we still managed to catch a considerable number of

Osteochilus hasseltii Rasbora tubbi, and Nematabramis steindachneri, a small cyprinid with a deeply-keeled body. While lifting up some rocks, we caught a fleeting glimpse of something long, sinuous and black swimming away. By putting the net in the vicinity and kicking about the substrate, the next scoop of the net brought up a slithering walking catfish (Clarias teijsmanni). We also managed to catch some very large, black tadpoles (probably of a Leptobrachium sp.); the guide told us that these were a delicacy, so we gave him some. Sadly, we never got around to finding out what they tasted like. Our prize catch of the day was obtained further upriver by the second team: the Brunei Beauty (Betta macrostoma). The males were really stunning, with their rich hue of orange-red. We had practically used up all our drinking water by this time and we had no choice but to resort to drinking from the hot spring. The water was warm (about 60•C), smelt sulfurous and tasted faintly of kerosene. In our exhausted state, we were simply too tired to care. We now faced our trek back with dread and rightly so, for it was worse going back than going there. Stumbling along and enduring the pain from our cramps caused by salt deficiency, we finally made it back to camp. Our suffering was eased somewhat by our sumptuous dinner, which consisted of the smoked cyprinids, catfish in soup and the heart of Nibong palm (Oncosperma tigillarium).

Our fifth day in Brunei saw us sampling the streams near our field camp. Thankfully, the distances were much closer and we were not made to suffer like the day before. The first stream we came to was a wallowing point for bearded pig (Sus barbatus) and Sambar Deer (Cervus unicolor). The guides pointed out a large pool of mud and nearby trees with their bark scraped off - evidence of the animals' presence. The water in the stream was brownish and the pH was We caught a bar-bellied spiny eel low (4.4). (Macrognathus circumcinctus) and many small catfishes in the stream, mostly Ompok jaynei, Clarias teijsmanni and an undescribed species of Silurichthys. There were also many barbs and rasboras, most notable being Rasbora kottelati, which looks identical to the clown rasbora (R. kalochroma) save for the additional black spot on the caudal peduncle, and the five-banded barb (Puntius pentazona). The streams we sampled that day were all draining from peat swamp forests - the water was of a dark-brown tint and very acidic (pH about 4.0). This was evident in the

fishes we caught, most of which can only be found in such habitats. That night, one of the guides went hunting with a catapult and came back with a dead Greater Mousedeer (Tragulus napu), which he had stalked and shot. It was cleaned and smoked for future use.

On the way back to the village, it began to rain and all our precautions for getting sun burnt were for naught. The journey back wasn't all that bad and some of us even got to see flocks of hornbills passing overhead. We arrived back in the village in time to do a final bit of sampling. In any case, we caught nothing new and settled down for a delicious dinner during out last night in the village. We tried the smoked mousedeer and also a Sambar deer that some of the villagers had hunted. The next day, we were back on the boat and reached Bandar Seri Begawan after an uneventful journey.

Our second phase of the survey was to a lake known as Tasek Marimbun. Access was considerably easier and we were able to drive all the way to the shore of the lake. As before, we boarded a boat which was to take us to the field camp across the lake. The scenery during our journey was beautiful and as the boat sped across the lake, we could see Purple Herons and Oriental Darters taking off in fright at our approach. The lake had lots of sedges and small trees growing along the shoreline and the water was tinted brown with the pH being relatively low at 4.2. The problem when using such blackwater for bathing or washing up was the fact that the high amount of dissolved sulphate made it difficult to obtain a lather and difficult to wash the soap off anything, as we discovered throughout our entire journey.

Our first sampling site at the lake was a small blackwater stream running behind the field camp. The stream yielded nothing other than the fishes we had been catching all along. As the field camp had a jetty leading out to the lake, this was where we turned our attention to next. By using a cast net, we were able to obtain large numbers of the striped barb, *Puntius johorensis*, the first few which we preserved for study. We were destined to catch large numbers of striped barbs, many of which would eventually end up deep fried and in our stomachs. A similar method of fishing in another spot nearer the middle of the lake yielded large numbers of juvenile kissing gouramies (*Helostoma temminckii*). Again, many were destined

for food as we needed only a few specimens for scientific study. Besides using the cast net, we also laid out gill and trammel nets in the middle of the lake, and laid out lines baited with earthworms or dead fish. By nightfall, we were already beginning to check the gill nets, which yielded our usual catch of large cyprinids, such as Hampala bimaculata and Cyclocheilichthys apogon. That night, we also landed two species of snakeheads (Channa striata and C. lucius), two species of walking catfish (Clarias teijsmanni and C. nieuhofii) and climbing perch (Anabas testudineus). Dawn saw us checking the lines laid out the previous evening and more snakehead and walking catfishes were brought in. We spent the day boating around the lake sampling the different streams leading in and out of the lake. Late afternoon found us trying to catch fish using hook-andline at Sungai Merimbun, one of the outflows of the lake. Using earthworms as bait, we managed to catch some small catfishes, but otherwise had not much luck. As it was getting dark, we decided to call it a day and retired to the field camp for rest. Our routine the next day was pretty much the same, only this time we laid out another gill net in a different part of the lake. This was done, the guides told us, with the intent of True enough, subsequent catching knifefishes. examination of the net a few hours later yielded a large knifefish (Chitala borneensis). Another net laid out nearby yielded large kissing gouramies after a similar examination. After sampling another swampy area in which we caught lots of kissing gouramies and threespot gouramies (Trichogaster trichopterus), we returned to Sungai Mendaram the next day to try our luck, this time using a plastic bottle as a feeder into which we placed rancid leftovers as ground bait. This worked like a charm and soon, we were getting bites on all our lines. We managed to haul in a pretty good catch of Mystus and Hemibagrus before returning to the field camp, stopping to pick up some more knifefishes from the gill net along the way. We thought that since the feeder had worked so well, we should employ it in a similar fashion at our jetty. By using a cast net near the feeder, we were able to catch Ompok jaynei, which we had never caught before with the cast net. This was to be our last night at the field camp, something for which we were thankful for because of the swarms of mosquitoes which followed you every

night. The next day, we were back in Bandar Seri Begawan and civilization.

We still had a few days before we were to return to Singapore and we decided to sample a few more places before we left for home. One of the last places we visited was the waterfall at the Mendaram river. The stream was generally swift and had a rocky bottom with lots of riffles. All in all, it would have been a nondescript place were it not for the fact that that this was where the Brunei Beauty (Betta macrostoma) could be caught in quantity. We caught several pairs of the beautiful fish, together with some Rasbora tubbi, which was all the stream yielded after several hours of hard work. We spent our last afternoon in Brunei fishing in a blackwater stream (pH 3.3) draining from a peat swamp forest that was being cleared. We caught more Betta cf. akarensis, Ompok jaynei, Rasbora kottelati and Silurichthys sp.

After a farewell dinner hosted by the staff of the Brunei Museum, we were flying over the South China Sea on our way back to Singapore the next afternoon, bringing back with us memories of a fruiful trip.

- 1. Among the large cyprinids we caught was this Barbodes balleroides.
- 2. Rasbora cephalotaenia was one of the larger species of rasboras we encountered.
- Puntius eugrammus was one of the most common species of barb caught.
- 4. Puntius binotatus.
- This large Hampala bimaculata was caught by one of our guides. Its flesh was delicate, if somewhat tasteless.
- 6. Cyclocheilichthys apogon.
- Hemibagrus nemurus. This voracious catfish was easily caught by hook-and-line.
- 8. Clarias teijsmanni was another catfish species we caught in large numbers.
- 9. Kryptopterus limpok.
- 10. This large Kryptopterus apogon was caught using hook-and-line.
- 11. The Belait River, from where we travelled upriver to reach the Ingei River.
- 12. The Ingei River near our field camp.
- 13. Many rattan palms could be seen growing along the banks of the Ingei River.
- 14. The tea-coloured water of the Ingei River.
- 15. Two of the forested streams which we sampled in.
- 16. An idyllic scene of Tasek Merimbun.

Study Group Corner

CAT CHAT

R Boardman, 10 Hood Grove, Leigh, Lancashire, WN7 3AX, UK.

As a 'study' group we should be keeping an eye on our hobby and pass our experiences on to others. Your help is requested to enable this to happen. A set of guidelines have been compiled to assist you to collect information.

Each section has a suggested layout, which can be easily understood and followed. All information should be sent to Rob Boardman who will collate it for "Cat Chat Corner" for further comment. To ensure that we are talking about the same species/fish, please do not use shop/trade names because they are unreliable and can be extremely confusing.

The Fish

- 1. What is it? (Latin name, C, L or Lda number no shop or trade names please)
- 2. How big is it/are they?
- 3. How many, a pair, a shoal or a trio
- 4. How do you keep it/them
 - In a large tank
 - In warm water temp? (pH etc if known)
 - Type of habitat (Rocks, plant pots, caves, bogwood, sandy bottom, gravel, with or without plants Filtration: undergravel, internal, external (medium used) or sponge type aeration filter
 - Is there a lot of current, slow running or still water
- 5. Food: dry, live or mixed. What type?

Breeding details

- 1. Species type (Latin name, C or L number no shop or trade names please)
- 2. Colour changes from norm to breeding condition
- 3. Size of tank used for breeding
- 4. Water conditions, PH, nitrates etc
- 5. How the tank is prepared i.e. caves, floating mops, plants or plant pots etc.
- 6. Preparation of the fish to breed (raised temperature, cold water changes, extra food etc.)
- 7. Description of the breeding (how they perform)
- 8. Care of the eggs/fry (by you or the parents)
- 9. If you can, try drawings/photos of fry in various stages of growth (a photo of the adults is always useful)

Dental & Skeletal study

- 1. Description of bones and teeth (usually from deceased fish, please don't kill one just to prove a point)
- 2. Discussion of bone/teeth functions
- 3. Pictures/line drawing.
- 4. How skeleton or teeth were obtained (donated or own specimens)

Unknown species - A self guide to find out what you've got

- 1. Is it similar to another type of fish?
- 2. Where did you buy it?
- 3. Do you know the importer?
- 4. Where was it exported from? (Not a definitive guide as fish are often moved prior to exportation)
- 5. What other fish came in with it?
- 6. Have you tried the Internet? Planet Catfish offers identification services via a forum
- 7. What research have you carried out? If you have still not found anything, send details to me and I will follow it up. Replies will be published in Cat Chat

Comparative study of Asian catfish

We are also interested in any information relating to Asian catfish. There is very little on breeding in captivity etc. Any information requested in the previous paragraphs may prove to be extremely useful to other members.

If you wish to submit your own Article, please send it direct to the Editor

<bobcatfish2001@yahoo.co.uk>

Corydoras in China Mainland (Guangzhou especially)

By Marshel Lee (25 January 2003)

Corydoras is a Latin word. Nearly no English-Chinese dictionary in China embodies this strange word. But in Chinese, Corydoras has another cool name "Mouse Fish" since it has a similar appearance with the mouse. So it is really a conflict that a mouse fish is one kind of the catfish. Actually Chinese plays a big joke with Corydoras.

I think not many Chinese know about Corydoras. Always you could see such a scene in the agua shops:

"What is that?" a client asked the merchant and pointed at Corydoras Paleatus

"Flower Mouse" (Or "Mouse Fish"), said the merchant

"What do they eat?"

"Waste" (Or "Fish excrement"), said the merchant, "like a scavenger"

For many people in China, Corydoras is looked as a scavenger whose food is the waste of other fishes. Certainly it is not as common as Goldfish or Koi and in the other hand few persons will notice these little ones groveling on the substrate in the tank.

Generally you could find Corydoras Aeneus, its albino and Corydoras Paleatus in the aqua markets somewhere. Occasionally, you will see the Panda, Julii, Schwartzi, Sterbai, Trilineatus. It seems these 5 ones have been already commercially bred in Taiwan for a few years. If one day you can catch Adolfoi and Elegans, you are so fortunate that you can try a lucky draw on that day.

As I know, fish farms located in the peripheral area of Guangzhou breed 3 kinds of Corydoras: Aeneus, its albino and Paleatus. So the price is very cheap. In Guangzhou 1 Yuan RMB 1-2 ones is the retail price for these 3 Corydoras with the size 3 cm or so. Panda and Julii are imported from Taiwan. Many fish farms in Taiwan will provide the Panda and Julii quota in their stock lists. The retail price is 5-6 Yuan RMB and 15-20 Yuan RMB correspondingly. I guess other species are wild fishes and imported from South America via Hong

Kong or Taiwan. Many businessmen in Hong Kong or Taiwan will do business with Amazon Fishes Exporters from South America now and again. Due to the longdistance transportation and custom taxes, many Corydoras especially the wild ones are so expensive that many aquarists would not like to purchase them.

In Guangzhou, Tao Cui (Hong Kong) Aqua Shop is the only one who specializes in selling catfish. If you continuously go there week by week, you could see many new cory species. I have seen the Cory adolfoi, agassizzi, arcuatus, atropersonatus, blochi blochi, caudimaculatus, cf.cochui, delphax, elegans, ephippifer, gracilis, habrosus, hastatus etc in this catfish shop. Cory narcissus will be available at intervals since I have a good friend who had purchased this species there.

More and more local governments begin to hold a large international aquarium exhibit to enhance the reputation of the city. I know Beijing, Shanghai and Guangzhou each has such a big exhibit each year. But you could not find Corydoras in such a large fish-show game. Discus, Luohan, and Guppy are always the focus of the contest. No one will ask why there are no catfish and certainly few ones know about what is catfish. Aquarium is a new word in China. And for many Chinese, Corydoras is also a new fish. However, it is very inspiring that more and more younkers are very interested in this lovely fish although they also like other fishes and have no idea on the Corydoras.

No specialist and no guide material is the major obstacle of generalizing Corydoras and publicizing it in China. No one has the experience of keeping hundreds of cory species and no one has the professional knowledge on the cory. There is almost no Corydoras Chinese book in China mainland. Even in Taiwan, where the aquarium is quite developed, special books on Corydoras do not appear up to now. No one wish to translate the excellent books, such as Werner Seuss's "Corydoras, The most popular armoured catfishes of South America." and Aqualog's "All Corydoras", into Chinese.

Last week, I got the news that a few friends will open their Corydoras shop in Guangzhou next year. If it is true, the Corydoras market of China will be well activated since Guangzhou has a national radiation influence on other cities. If more people like Corydoras, more attention would be placed on it. I wish more and more merchants could sell Corydoras in China and wish the Corydoras could be accepted by the general aquarist.

Introduction of myself and the current aquarium condition in China

I live in Guangzhou, a large city in China. In these years, as the life quality improves so much in China, more and more families start to keep pets: dogs, cats, birds. Of which tropical fish gains much attention. Under such an environment, more and more fish farms surged in Southern China especially in Guangdong. Guangdong is a province in the southern of China and the climate here is very close to Eastern-Southern Asia. Guangzhou is the capital of Guangdong Province and is very near to Hong Kong. Depending on the advantage of the climate and the geography, Guangzhou has become to be the tropical fish trading center of China. So I can contact and see many fish species.

The research and the development on aquarium in China drop behind many other countries. You could find a few introduction books on aquarium, of which most are written by an English or German and translated into Chinese. These books tell you some general rules such as how to change water, how to choose fish food etc. But few books on special species exist in the market. A few well-known books such as ATLAS 2300, Das Optimal Aquarium (The Perfect Aquagrass Aquarium) have Chinese version now which are translated by Taiwan publishing companies. These companies also published a few special books such as on Guppy, Betta (translated from Japanese). But I never read a book just for Corydoras or Catfishes. I really want to have a Corydoras book as my guide, but I cannot purchase the Werner Seuss's "Corydoras, The most popular armoured catfishes of South America." and Aqualog's "All Corydoras" through Amazon.com since no shipment from Amazon. com can reach the mainland of China. After all, few books in foreign language appear in even the largest bookstore.

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Many youngsters like fishes and begin to keep fishes in home. In Guangzhou, I know some fish lovers who specialize in one species, some like guppy, some like Betta, some keeps discus, and some keep Koi. I love Corydoras but only found a friend who also love it and keep it only. We have some online forums and each forum contains many species sections. We always discuss and ask questions there, post a picture downloaded from Internet (not for commercially use), also share the experience and the retail (wholesale) price. Anything related with fishes, we will upload it to the forum. Sometimes we will hold a few entertainments to meet together just like a fish club.

I am a professional in a multinational insurance company. Exclude work, I have many hobbies, sports, PC games, fishes etc. I began to keep fish 3 years ago and soon fell in love with fishes. In the beginning, I have only a small round 2-liter tank. But now I have more than 20 tanks in my room. After I have moved to my new house, I plan to purchase a 3-floor large tank to collect more Corydoras. Due to the heavy workload and other family things, I cannot keep many Corydoras currently. I have 5 Corydoras now, Corydoras Aeneus, its albino, Paleatus, Julii and Panda. Of course I have some other catfishes such as glass catfish, Botia macracartha and some Synodotis. Last week, I have been to Beijing on business and bought Rineloricaria hasemani in a friend's agua shop. I have no place for them and then gave them to another friend in Guangzhou.

I wish more and more people in China can know of this species and get interest on keeping it. I will try my hard to let more persons notice Corydoras and hope Chinese could pay more attention on Corydoras since the Corydoras is really the fortune of all mankind. Mankind should value the species. I am sparing some time after work to translate a few good Corydoras or catfish articles and try to publish them on some well know aquarium magazines. This is a good way to attract attentions. Wish I could succeed and wish Corydoras could succeed in China. By the way, my first translating article of "Cuckoo Catfish - Synodontis multipunctatus - Boulenger, 1898" by Dinyar Lalkaka will be published by Taiwan's "Aqua pets Life" magazine. I wish to take this chance to give my sincere thanks to Mr. Dinyar Lalkaka (also a catfish lover) for his self-giving supports. It is a good start and wish all catfish lovers' good luck.

THE ASIAN BANJOS: CATFISHES OF THE FAMILY AKYSIDAE

Ng Heok Hee

School of Biological Sciences, National University of Singapore, Kent Ridge, Singapore 119260

One of the most unusual and poorly understood Asian catfish families is the Akysidae. This family consists of cryptically coloured catfishes with tiny eyes; all its members possessing four pairs of barbels, strong dorsal and pectoral spines, adipose fin with a long base and a tough leathery skin. The entire surfaces of the head and body are also covered with small tubercles.

The members of the family generally inhabit the bottoms of deep, relatively fast-flowing rivers and streams. Their habitat preference probably explains why they are so rarely encountered in the aquarium trade. The Akysidae consists of four genera, Akysis, Acrochordonichthys, Breitensteinia and Parakysis, with about 29 described species.

The genus Akysis are small, attractively coloured catfishes, many of which are predominantly dark brown with irregular light-yellow transverse bands across the back and sides behind the dorsal and adipose fins. Its has four to six even rows of small tubercles running along the sides of the body from behind the dorsal fin. There are currently 13 described species of Akysis (see Ng & Kottelat, 1996) and they are found throughout Southeast Asia and southern China.

Like all other catfish, they are nocturnal and prefer to hide around tree stumps and fallen logs where leaves and twigs accumulate. In the aquarium, they show a tendency to burrow into the gravel and remain there for most of the day. They usually swim close to the substrate in short quick bursts from one place to another. This probably helps to prevent the current from sweeping the fish away. Otherwise, they are relatively passive and stay hidden.

These diminutive catfish are predatory in nature and many specimens of Akysis hendricksoni regurgitated small atyid shrimps of the genus Caridina after capture (Ng, 1996). In the aquarium, they will readily take bloodworms. In some of the species, sexual dimorphism is present (Ng & Kottelat, 1996); males have shorter pelvic fins located further away from the anal fin. The pelvic fins of the males are also more closely-set and curved to form a bowl. The use of the pelvic fins in the male remains unknown. They may be used for handling eggs or for directing the sperm towards the eggs (Ng & Kottelat, 1996).

Acrochordonichthys bears a striking resemblance to the banjo catfishes (family Aspredinidae) of South America. This resemblance is not merely passing, as the two families are believed to be related (de Pinna, 1996). Acrochordonichthys is quite flattened in form, with a series of horizontal rows of small tubercles located along the body just behind the dorsal fin. Overall, the fish is coloured dark brown with irregular blotches of light brown occasionally present, resembling a piece of dead wood. The taxonomy of the genus Acrochordonichthys is presently confused, with as many as 11 species described. and a revision is badly needed. The genus is found throughout the Malay Peninsula, Sumatra, Java and Borneo.

Acrochordonichthys not only looks like a piece of dead wood, its behaves like a piece of dead wood! Acrochordonichthys is one of the most lethargic of catfishes; they spend most of their time lying on the substrate and you can literally pick them out of the water without a struggle. Release them back into the aquarium and they will drift the water current until they reach the substrate without any attempt at swimming. In its natural habitat, the fish prefers to rest against tree stumps and fallen logs in deep water. As such, the fish is not easy to catch with nets, although they are caught in relatively large numbers in southern Thailand by simply sinking lengths of hollow bamboo rods into the river bed and harvesting the fish from within the rods a few days later. They can also be caught by hook and line baited with earthworms (Inger & Chin, 1962). In southern Borneo (Kalimantan), children catch the fish by taking a tree branch, tying a baited hook off each twig, tying a big rock to the limb and throwing the whole thing into the river - in this way, it possible to catch as many as ten is Acrochordonichthys (D. Siebert, pers. comm. to P. K. L. Ng).

Hora (1941) reported on the unusual structure of its gill openings — a spout-like structure is found immediately below the base of the pectoral fin. The water leaving the gills is apparently channeled through this spout, an unusual respiratory feature. Like Akysis, there is potential in the aquarium trade for this fish, in spite of its incredibly passive nature. Acrochordonichthys secretes a white, mucoidal substance from the axillary pore located at the base of the pectoral fins when disturbed. The function of this secretion is unknown, but given the circumstances under which it is produced, it is very likely for defence, as in the South American doradids.

The highly specialized genus Breitensteinia consists of a single, poorly-known species, B. insignis, known only from Borneo and Sumatra. Breitensteinia is easily differentiated from the other members of the Akysidae on the account of its very long caudal peduncle and the lack of an adipose fin. Breitensteinia, like Acrochordonichthys, are very lethargic and among the laziest of catfishes. Even so, they are quite predatory and according to Roberts (1989), two preserved specimens were found with small prawns in their stomachs.

Both Acrochordonichthys and Breitensteinia have the unusual ability to undergo periodic moulting of the skin. According to Ferraris (1991), large, thin sheets of the epidermal tissue periodically slough off in Breitensteinia, to be replaced by new tissue growing underneath. This skin moulting is also seen in the Neotropical aspredinids, perhaps offering further proof of their relationship.

The genus Parakysis looks like Akysis except for two major differences - Parakysis has tubercles found all over the body (instead of arranged in longitudinal rows) and a long low adipose ridge (instead of a distinct adipose fin). The four known species of Parakysis (see Ng & Lim, 1995) found throughout the Malay Peninsula, Sumatra and Borneo can be separated by differences in their head and tail shapes. Parakysis can be found hiding in clumps of vegetation where they can be easily caught; they seem to prefer burrowing into dense clumps of aquatic grasses. Like most other species of catfish, they are nocturnal and hide for most of the day. They move around by using their pelvic fins to push themselves off the substrate and 'hopping' on it. They are predatory in nature and will readily eat bloodworms when kept in aguaria.

Despite what we already know of the biology of these secretive catfishes, much more remains to be discovered about their natural history; for instance, we know almost next to nothing about the reproduction of these fascinating fish. Sadly, many of the fishes are directly threatened by Man's activities. Logging, deforestation and the construction of dams have threatened the continued survival of their natural habitats. The challenge that lies ahead for scientists and aquarists alike would be to find out more about the biology of these intriguing fish and their conservation.

Acknowledgments

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References

de Pinna, M. C. C., 1996. A phylogenetic analysis of the Asian catfish families Sisoridae, Akysidae, and Amblycipitidae, with a hypothesis on the relationships of the Neotropical Aspredinidae (Teleostei, Ostariophysi). Fieldiana: Zool. (New Series) 84: 1-83.

Ferraris, C., 1991. Catfish in the Aquarium. Tetra Press, Morris Plains, N. J. 199 pp.

Hora, S. L., 1941. On a small collection of fish from Perak, Federated Malay States. Bull. Raffles Mus. 17: 5-11.

Inger, R. & P. K. Chin, 1962. The freshwater fishes of North Borneo. Fieldiana: Zool. 45: 1-268.

Ng, H. H., 1996. Akysis heterurus, a new species of catfish (Teleostei: Akysidae) from eastern Sumatra, with notes on Akysis hendricksoni, Alfred. Raffles Bull. Zool. 44: 3-10.

Ng, H. H. & M. Kottelat, 1996. Akysis fuscus, a new species of catfish from western Borneo (Teleostei: Akysidae). Ichthyol. Explor. Freshwaters 7: .

Ng, H. H. & K. K. P. Lim, 1995. A revision of the Southeast Asian catfish genus Parakysis (Teleostei: Akysidae), with descriptions of two new species. Ichthyol. Explor. Freshwaters 6: 255-266.

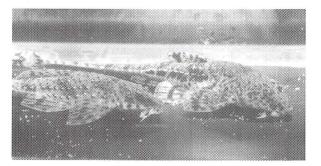
Roberts, T. R., 1989. The freshwater fishes of Western Borneo (Kalimantan Barat, Indonesia). Mem. California Acad. Sci. 14: 1-210.

An experience with Whiptail Catfish of the Genus *Rineloricaria*

By Ian Fuller

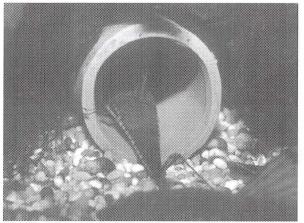
The term Whiptail catfish points us to a group of fishes that are very unique in their physical make up. There are many genera that fall into the category commonly referred to as 'Whiptails' my experience with them has been limited to members of the genus *Rineloricaria*. There are around forty know species of this genus all of which have distinctive long thin tapering twig like body shapes that are covered over their entire lengths by hard interlocking bony plates known as scutes.

Another striking feature of these fishes is their external mouthparts that are formed into suction like pads; some being more pronounced than others and may have lace like filaments on their trailing edges. The most difficult aspect with these fishes is their identification; many species have very similar body and fin markings.



When it comes to housing these fishes it is not too difficult as they are easily pleased, tank size is not that important so long as it is large enough for the fish not to be cramped. A 45cm x 25cm x 25cm tank would be adequate for a single pair and for the substrate; I would use fine gravel or smooth grained course sand with either internal or external power filtration. Filtration is to a certain degree a personal preference thing, but if an under gravel system is your preferred choice then I would recommend a slightly larger tank 60cm x 30cm x 30cm and larger sized gravel, the fine gravel or sand would soon become clogged and ineffective. A power head would be needed either fitted to the under gravel filter uplift tube or as a separate unit, this is to provide a good flow of water around the tank. Rineloricaria as well as other genera of whiptail catfish enjoy good water movement; in their natural habitats they are found in running fairly shallow running water. They are very strong swimmers but seem to prefer to manoeuvre themselves around using their pectoral and ventral fins.

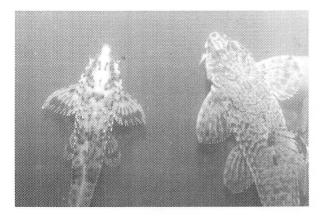
Tank furnishings are again something that is a personal thing but these fish like to graze amongst leaf litter and on pieces of wood, I have a breeding trio of what I believe to be Rineloricaria hasemani Isbrücker & Niissen, 1979 their tank is a 45 cm x 45 cm x 45 cm and is filtered by an internal power filter, the substrate is a fifteen millimetre layer of smooth coarse sand, the rest of the décor consists of three pieces of bog wood, two large clumps of Java Fern and two thirty five millimetre diameter terracotta closed of tubes. These tubes are normally used for large indoor plant displays where they are inserted to full depth into the soil, the pot and then filled with water, which then leaches slowly into the soil. Although not designed for the aquatic trade they make ideal breeding sites for Rineloricaria to spawn in, or for that matter any of the other smaller Ancistrine cave spawners.



Feeding Rineloricaria is not much of a problem because they will eat almost anything. I read in many publications that these fish are supposed to be vegetarian but I have found that all the plants that are in the tanks with all my six species Rineloricaria are perfectly safe, for that matter so is the algae that grows everywhere. I have tried the same experiment in all the tanks that I house these fish in, in each tank I have placed all at the same time, tablet, granulated and algae wafers. The fish are onto the tablet and granulated food almost straight away but the algae food takes until the following morning before it disappears. I firmly believe that most if not all species of Rineloricaria are carrion and insectivorous and the diet that I give my fish consists of frozen or fresh chopped muscle, frozen bloodworm, granulated catfish pellets, tablet, chopped earth worm and when available, live blood worm. Whenever I have tried

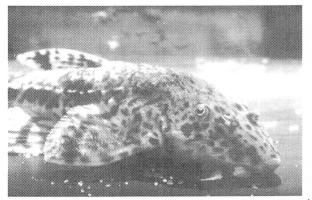
feeding vegetable foods such as cucumber or courgette, they have been ignored and had to be removed. The fact that two of the species are breeding tells me that their present diet is pretty much to their liking.

Sexing these fish when freshly imported can be a bit of a problem unless the fish have arrived in really good condition, then usually the males can be distinguished by the fact that they have odontodes (Bristles) on the side of the head and on the upper surface of the pectoral fins. With some species the presence of odontodes is less evident and other methods of sexing need to be used. The first of these is the shape of the head when viewed from above; the head of the male is wider and less pointed than the female but she is wider and plumper in the body. The second area to look at is the pectoral and dorsal fin spine, which tend to be a little thicker in males.

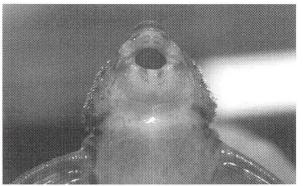


Sometimes it is really pot luck when buying so-called pairs, especially if the fish are on the small side and immature, so when I cannot be one hundred percent sure I usually buy at least four, two fat and two slim, very scientific I know but it often works. Once the fish are settled and conditioned it will not be too difficult to tell the sexes apart.

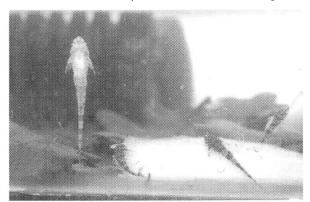
In the tank with my trio of Rineloricaria hasemani I have two of the terracotta tubes and after about a



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week the male took up residence in one of them, he would stay in there all the time or at least until the lights went out and then he would come out and forage for food. The two females on the other hand were always out and about looking for food. Once a female had come into breeding condition she would join the male in the tube and the two of them would stay in there for several hours, or if she was not entirely happy only a few minutes. A day or so later she would join him again only this time when she came out the male could be seen lying on top of a group of largish, possibly three millimetre diameter greenish coloured eggs. The male religiously sticks to his task of guarding the eggs for the following ten to twelve days, during which time as far as I could tell, because of not being able to observe any night time activity, he did not eat. When the young started to hatch they were all eaten by the male, so a month or so later they had spawned again, I waited until day ten when I could see that the eggs were very dark and nearing hatching, then removed the terracotta tube from the tank and gently expelled the male, who shot of and hid amongst the plants and bog wood, in fact I never saw him for about six days and then one day he appeared taking up residence in the other tube. The tube with the eggs in was placed in a shallow tank containing water from the main spawning tank; a sponge filter and an air stone to create fairly powerful water flow around the tube with maximum oxygen content. The following day all the fry had emerged from the eggs looking exactly like miniatures of their parents. There were no signs of



THE BRUIN SKREEUBER

By David Marshall

Please note that the following article was written for the February 2003 issue of Ryedale Reporter (the monthly magazine of Ryedale Aquarist Society). Although interested in all the various species of catfish available in our hobby David has a great passion for Synodontis and currently has around 20 members of this genus spread around the tanks in his fish house.

In the summer of 1993 several major aquatic wholesalers were given the opportunity to bring into the U.K. a large consignment of a 'new' Synodontis species, all of a juvenile form, known commonly as the Bruin Skreeuber (Afrikaans), Brown Squeaker, and to science as Synodontis zambezensis. As the majority of catfish fans will be aware squeaker refers to the noise the majority of Synodontis species make (there are over 100 scientifically named and a large number awaiting classification which are tagged as 'species' e. g. Synodontis 'species Cameroon').

Unlike the majority of Synodontis which enter our hobby, either as wild catches or from the large aquarium fish breeding establishments of Eastern Europe, where pairs are often hormone stimulated in order to reproduce, these particular fish were obtained, or so I am reliably informed, as surplus stock from a large scale fish farming operation in Southern Africa, with Government permission first obtained for their

Continued from previous page

a yolk sack, like I see with newly hatched Corydoras, so I decided to put a little food in the tank, this was in the form of two broken up sinking tablets, by my return the next evening all the food was gone. Tablet and catfish pellets form the basis of their diet with a little chopped muscle.

After their first month the fry have almost doubled in size and because of the amount of food they are getting through, I carry out a twenty five percent water change every day. There is no substrate in the tank and their environment is quite bright, which is unnatural for them so I have introduced a dozen or so dried oak leaves to help with water conditioning and to give the fry some cover, . By the time they reach two months they will be ready to move into a larger growing on tank making the hatching tank ready for the next batch of fry, which will not be long in coming as the male is now sitting on another batch of light release. They had thus escaped the table for life in aquarists' tank.

I was fortunate enough to pay a visit to the retail arm of BAS at Bolton (this Lancashire retail outlet is one of the largest of its kind in Europe) only a few days after these particular fish came out of quarantine. With plenty of specimens to choose from, and going on slight differences in body girth and shape of the adipose fin, I chose what I hoped would be a pair? Even in their travelling bag these were beautiful little fish. Their background body colour was a solid light blue-grey with a foreground of dark grey spots.

Upon arriving home the two fish were placed into a 36 x 12 x 12" tank in the company of various Loricarin, Barbus and Trichogaster species. They thrived with a tank temperature of 74 F and a pH of 7. Every day that past they became increasingly bolder until they reached a position were they were the first to any type of aquarium fish food that came their way. Thankfully they caused little aggression towards their fellow tank mates and restricted there own territorial quarrels to slight bouts of 'feuding'.

By now I had begun a search for information on the Bruin Skreeuber. Having two common names and a scientific name to go on made this particular task fairly easy. The first fact of great interest, as stated by more than one textbook author, was that of the 2500 species of fish classed as catfish it was the Bruin Skreeuber which had been the most closely studied in its natural habitat(s). To write down all the facts I was able to discover about this particular fish would fill to much space so here are the ones which may be of most interest: -

1. The populations of Bruin Skreeuber vary in their body colouration. This is the only known species of Synodontis, in a wild form, in which albino patches can occur upon the body.

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CAT CHAT

2. These particular fish are found in pools and slow-flowing reaches of perennial and seasonal rivers.

3. One of the true upside down catfish they find shelter in crevices and the underside of logs.

4. The natives of Southern Africa will eat the flesh of this particular species but, when possible, avoid fishing in areas were these fish are known to frequent as the strong tips of the pectoral fins can easily rip through nets (and flesh if my experiences with Synodontis 'species Zaire' are concerned, I will never forget the blistering and swelling of the affected fingers).

Fishermen bait their hooks with cheese in order to catch this and other catfish species.

5. Breeds in the seasonal floodplains caused by monsoon-like rain (as do the better known S. angelicus and S. decorus).

6. The colours of the eggs produced by a female Bruin Skreeuber are dark orange.

As the weeks passed more and more specimens began to appear in both local and regional aquatic retail outlets. On 'first name terms' with the majority of proprietors I had great fun relaying the facts above. By now these particular fish were appearing more and more without either common or scientific names displayed and under the 'species' catch all.

Taking a great interest in these fish I managed to persuade several retail friends to keep asking any fellow customers who purchased one or more how they were getting along and this would lead to the emergence of some very interesting bits and pieces.

Firstly the vast majority thrived in aquaria. In the short term the growth in body size (the two in my care went well over the 8" (200mm) length quoted for adult specimens in the wild in less than 14 months) and the increase in body weight had been very impressive, taking some keepers by surprise.

12 months down the line it became clear that the way the juvenile Bruin Skreeuber's had been kept had a large effect on their social behaviour? Those raised in pairs or small groups had, on the whole, proved to be of very little problem and were fine to house with fish of an equal size and strength. In contrast those kept singly, even in a mixed Synodontis tank, became tyrants attacking everything that moved around them.

As an example of the latter a local retailer took back a 6" Bruin Skreeuber that had been kept singly, as the aquarist concerned was a good customer who had reached a stage were he was despairing of the antics of this particular fish. The retailer concerned believed he would be able to sell this fish on but had not bargained on its unsociable traits (which he believed were second only to the 'king of thugs' S. acanthomias) and ended up having to keep it in the shop with a label which read Synodontis 'species Pit Bull Terrier' and this was the one tank in the shop that he dare not put his hand into.

Sadly, in the long term, we had found a fish for the grouping Yorkshire catfish fans used to class as 'Albert's complex' (in reference to S. alberti) in that the initial swift growth was countered by, in Synodontis terms, a short lifespan (the slower the growth rate the longer these particular fish appear to live and, as an example, a slow growing S. afrofischeri in my care is close to 21 years old). From the retailer feedback the average lifespan for these fish is 4 years with the oldest specimen we were able to keep tabs upon reaching 6 years of age. My pair lived for 4 years and 6 months and when their time came things happened very quickly, and without warning or any visible signs, with both passing away (all their fellow tank companions were fine) within 5 days of each other.

There is a gap in our article that we cannot fill as no breeding attempts, or even a sure-fire way of telling the sexes apart, were ever spoken of and I was never 100% sure that the two fish in my care were male and female?

As a little 'moan' I feel that the brown part of their common name is a little misleading in order to describe all of the regional variations of S. zambezensis and as my two matured their body colour became a solid grey without any hint of even a brown freckle.

As far as I am aware no further batches of this particular Squeaker have appeared in the U.K. since those of 1994. Should this happen in the future, and a U.K.-based aquarist see these fish before I do, please let me know as I would love a second chance to keep and study a fish well worth saving tank space for.