

FISHKEEPERS AND WATER GARDENERS

# BULLETIN

VOLUME 5 ISSUE 14 PRICE £1.95 (UK)



JOURNAL OF THE FEDERATION OF BRITISH AQUATIC SOCIETIES  
[www.fbas.co.uk](http://www.fbas.co.uk)

### From the Editor

Although you will find a full tribute to Derek Lambert in this issue, I felt that I would like to add a few words of my own concerning the sad loss of someone I had known personally for many years. I'd just like to say "What a great hobbyist he was. Thanks, Derek, for all your help to the hobby and hobbyists throughout the world."

With the sun shining (Yes! There it was! However, you'll be reading this a month or so later than when I'm writing this so there's hope yet!), the water garden should be looking its best; Lilies just about to come into bloom and marginal plants about to take over just about every area of your pond.

To reflect outdoor activities, we've got one or two aquatic plant related items once you get past the beautiful water lilies featured on our cover. Should you need more ideas for the water garden you could do worse than visit us on the FBAS Stand at Hampton Court Palace Flower Show – 6<sup>th</sup>–11<sup>th</sup> July. It's a complete day out for the enthusiast.

For the competitive fishkeeper, why not let us have your experiences of the 'Show Scene'? Tell our readers what drives you on to travel the country each weekend with your fish – how many of them survive this trauma by the end of the year?

See you at Hampton Court,

Malcolm Goss

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cover photo: Tropical Water Lilies  
Malcolm Goss

### New Boys on the Block

The front cover of the last issue, volume 5 issue 13 featured a new fish to me, *Crossocheilus denisonii*. This fish so named in Baensch Aquarium Atlas (Photo Index 1-5) However this fish being described in a white paper found on the internet revealed the more possible correct name *Puntius denisonii* (Day 1865). In all fairness Baensch have marked the name with a "?"

I was alerted to this fish by the proprietor of Chenies Aquatics, Graham Robb as he had personally imported them himself after seeing them at wholesaler in Holland. As soon as I saw them, I just had to have some, and my wife kindly brought four as a Christmas present for me. Graham always quarantined his fish, so I had to wait ten days before I could take them home.

When this fish first appeared, some 2/3 years ago they caused a sensation. No one had seen such a beautiful fish from the River Athirapilly an area of Chalakudy in the Trichur district of India. Many fish are imported from India but these had not been seen before. The first imports of this Barb were large fish, being 150mm that I feel is about full size for this species. This made them very expensive; the fish that I brought had a price tag of £26.00 each with just under 90mm in total length.

Pete Liprot reported in Today's Fishkeeper, November 2001 that a second import of these fish differed from the first shipment, both using the same name. He then describes these fish as "Form A" and the second import as "Form B".

Form A as in both shipments is an elongated fish that can be compared to *Epalzeorhynchus* or *Crossocheilus* but differ swimming in typical Barb fashion, fast active and schooling. Young fish are quite intensely coloured with a black line down the body from behind the snout to the caudal peduncle. An intense red stripe just above this from the eye backwards to under the base of the dorsal fin and a red leading edge to the dorsal with a black area more or less central to this. The tail has a pale yellow spot followed by a black spot extending almost to the extreme tip of each tail lobe.

Form B is reported to not grow so large, around 120mm. It is also even more attractive than Form A as that it does not noticeable lose its colour as it grows. If anything it is said to improve. The black line running through the body starts at the snout unlike the other fish of Form A. The red line also reaches further towards the tail. However the yellow and black tail spots are less noticeable than in Form A. This fish differs from Form A in that it is found at the base of the Athirapilly Waterfalls, being from the River Cherupuzha in the trutty belt on the Kerala/Karnataka slate

Borders. It has been collected from a high range area above a water reservoir.



There is no information as to whether these are actually different regional forms of one species, or two separate but closely related species or even if they are not that closely related at all. This will require the attention of a taxonomist to define which of these forms is the true *Puntius denisonii*, if either and what name we should give to the other form.

Water conditions should have a pH of around 7, with a temperature close to the mid 70.s Fahrenheit. As you can imagine with highly aerated water forming part of their habitat being found under a waterfall, require good and fast filtration. High oxygen is a must for these fish. If their aquarium is not large, then regular water changes will be a requirement. Water changes should be large to dilute waste products from their active metabolism. Although these Barbs have not been bred in captivity, a challenge is surely there, with a ready market for any young that

can make this an even more popular fish.

My fish (Form A) are in community aquaria, size 4x2x2 foot, and with a powerful internal filter. They feed very well on flake food with frozen Blood Worm given once a week. My fish do swim very fast, schooling even when feeding, the aquarium is very well furnished with a mixture of plant including Giant *Sagittaria* and many species of *Cryptocoryne* adding to the foreground plants giving midwater swimming space for these fantastic fish.

Malcolm Goss 28/2/04



Editor: Thanks to Pete Liprot for his information plus Andy Taylor from BAS for added information.

Photos: These pictures were taken by kind permission of Chenies Aquatics at Van Hage Garden Centre, Chenies Nr. Rickmansworth by Malcolm Goss



## Herbert Axelrod Flees US after Tax Evasion Charges

by Tom Bell.  
TRENTON, New Jersey (AP)



Herbert Axelrod and Evelyn

A philanthropist best known for selling millions of dollars worth of musical instruments at a discount to the New Jersey Symphony Orchestra has fled to Cuba to avoid tax fraud charges.

A federal judge issued an arrest warrant for 78-year-old pet products tycoon Herbert Axelrod after the multimillionaire failed to show up for an arraignment on charges that he hid income from the Internal Revenue Service.

Assistant U.S. Attorney Michael Guadagno said Axelrod's yacht was docked in Cuba and that Axelrod was staying at the Marina Hemingway, a four-star resort in Havana. The United States has no extradition treaty with Cuba.

Guadagno said Axelrod was aware of the charges against him and the court hearing scheduled for Wednesday. An Axelrod associate told the U.S. Attorney's Office that Axelrod recently travelled from Zurich, Switzerland, to Cuba and had no intention of returning to this country, Guadagno told U.S. District Court Judge Garrett Brown.

Attorney Michael Himmel, who had been representing Axelrod, said he had notified him of the indictment and Wednesday's court hearing but Himmel, who did not attend Wednesday's proceeding, told Guadagno that he had not been retained by Axelrod for the tax case.

Axelrod was charged with using Swiss bank accounts to hide income from the IRS.

In February 2003, Axelrod sold 30 rare Italian string instruments he had collected, which were valued at US\$50 million, to the New Jersey Symphony Orchestra for US\$18 million.

Herbert Axelrod, founder of TFH Publications, is an Honorary Vice-President of the FBA.

## Fish Tuberculosis

### Two Reports from either side of the Glass

At the ripe old age of 9, I won my first fish at a carnival. My hobby had begun, much to my mother's dismay. She was convinced that we were all going to catch a disease from my fish somehow. I always told her she was silly and you couldn't catch any diseases from fish. I have no intentions of admitting to her that she was right.

18 years later, I have encountered my first zoonotic disease. Currently I have a 10 gallon (38 litre) tank set up as a hospital tank harbouring the piscine equivalent of tuberculosis. Most references actually call this disease Fish TB, but it is not actually TB and it is transmissible to animals other than fish. Fish TB is caused by *Mycobacterium marinum*, a bacterium closely related to the TB bacteria, *Mycobacterium tuberculosis*. There are actually over 60 species of bacteria related to tuberculosis that can cause disease. They are typically able

to live in any number of environments, in soil, water and animals.

I am a histotechnologist, which, to those of you unfamiliar with health care, is the person who takes tissue and turns it into stained slides for pathologists to use in their diagnoses.

It is often difficult to diagnose *M. marinum* bacteria this way and often requires a culture. A typical lab wouldn't usually bother with all this for an aquarist, but being able to do my own lab work is one advantage to this profession. When I discovered what I thought to be TB in my tank, I made slides of a sick fish and luckily located the bacteria without having to go through the trouble of culturing. *Mycobacteria* are acid fast, which means they stain bright pink against a blue background.

For those of you without a histology lab at your disposal, the symptoms of Fish TB are usually

wasting, lesions on the body, skeletal deformities (a few of mine developed curved spines), and loss of scales and colouration. This is a relentless disease. I have read that it is not considered treatable; however, I figured my 15-year-old Raphael catfish deserved a chance. Against the advice of my veterinarian, I have not euthanised my afflicted fish (over half died shortly after the disease bloomed anyway). The typical drugs for treating fish are the same as for humans, most often a combination of two drugs administered for at least three months. Currently I am trying Kanamycin (Kanamycin). Once the fish became emaciated I had no luck saving them. Traditional tricks for curing diseased fish, such as adding salt and raising the temperature, are ineffective and in the case of the raising temperature may even be detrimental. The bacteria grow better in warmer water; their optimum temperature is 30°C. They have no problem with salt either; they can infect saltwater fish as well as freshwater.

*Mycobacterium marinum* is considered slow growing, meaning it will take about 2 - 3 weeks for symptoms to develop after initial contact. People do not often become infected, although it is possible.

The bacteria usually enter the skin in small abrasions or cuts when you are performing tank maintenance. In humans, the symptoms are usually restricted to skin and soft tissue destruction. Lesions appear, first small and purple, and gradually grow. Treatment is difficult. The bacteria can also infect bones and tendons that can

feel like arthritis (Handbook Aquarium World November 2003 of Dermatology and Venereology, chapter 16, Cutaneous Tuberculosis and Atypical Mycobacterial Infection by Dr. L. Y. Chong). Certain types of fish tend to be more prone to carrying Fish TB, such as labyrinthfishes (Bettas, Gouramis). The outbreak in my tank occurred after adding six female Beta splendens to a community tank.

Prevention is key to avoiding this disease since it is so difficult to cure. The immune system is usually enough to prevent an infection in healthy fish. Stress, which suppresses the body's immune system, and/or wounds in fish are most likely to allow an infection to take hold. Therefore, eliminating stress is paramount. Although aquarists don't frequently get this disease, using gloves when cleaning infected tanks is highly recommended. Starting a siphon by mouth is also a good way to expose yourself unnecessarily to the bacteria. If a tank has been infected, it is considered best to bleach it well and dry it out before restocking it.

Information in this article was obtained from several sources, an infectious disease specialist, several pathologists at the facility where I work, my veterinarian, and a medical text chapter written by Barbara Brown and Richard Wallace Jr., as well as my own experiences. - Leslie Keefer From Delta Tale, Vol. 32 #2, Potomac Valley Aquarium Society Aquarticles

<http://aquarticles.com/index.html>

#### AQUARTICLES ADDENDUM.

August 2003:

After reading the above, Clara Brentwood sent Aquarticles the following account of her personal encounter with fish TB:

I am one of the unfortunate people who caught this *Mycobacterium marinum*.

I had a cut on my finger and cleaned the fish tank. In December 2002, I first noticed a small bump on the inside of the middle knuckle on my left index finger. I thought I had jammed my finger.

The lesions grew, became purple, and spread around the knuckle. An orthopaedic surgeon operated about the first of April 2003, and opened my finger and took a culture. He failed to get the culture to grow, so it couldn't be identified. I was on an oral antibiotic, *cephalexin*. Two weeks later the pus started pouring out of the wound. I went to the doctor the next day and was put in the hospital and started on intravenous *vancomycin*.

I was in the hospital 5 days, then sent home with a pic line, and continued the treatment at home for another two weeks. In the meantime, I was going to hydrotherapy to keep the wound draining.

Two weeks later the nodules were still growing, the pus was worse, and my finger was swelling and looking deformed. I was put back in the hospital and started on *biacin* and *ethambutol*. The hand surgeon operated on my finger, and gave me about a 50% chance of not losing it.

She cut it down both sides and the back, and on into my hand where it was spreading. I took hydrotherapy twice a day, and was hospitalized for 13 days. The cultures came back with a diagnosis of acid fast bacillus; the infectious disease doctor thought it was water-borne from a fish.

After being discharged, I am continuing my medication for at least 6 months. My finger is deformed and will need plastic surgery when the infection is entirely gone. The bacterium destroyed my tendons and joint in the infected finger. Finally the State of Tennessee laboratory identified this, after 3 months, and this was identified as *Microbacterium marinum*.

I was extremely weak and bed-ridden for a month after leaving the hospital, and still do not have my strength back in the three months since my second hospitalisation. Some of the fatigue might be the medication.

I thought you might like to hear about how this affected me. From what I read, cases in humans are rare, so I thought I might be of some help to your research. If you would like any more information, I would be glad to supply it. Thank you for your informative article and I hope I have been of some help to you.

Clara Jessup Brentwood, TN 37027  
Age 65 e-mail [doddies@comcast.net](mailto:doddies@comcast.net)

reprinted from the Journal of the FNZAS - AQUARIUM WORLD, November 2003



## THE AQUARIUM AT FLAMINGO LAND ZOO AND THEME PARK

by David Marshall, Ryedale  
Aquarist Society

Photographs by Mrs. Jackie  
Goulder, who retains the  
copyright



The North Yorkshire village of Kirbymisperton is situated halfway between the market towns of Malton and Pickering. In the mid-1960s the lands belonging to Kirbymisperton Hall were transformed into the Flamingo Park Zoological Gardens. As public tastes changed, so did the importance of the Zoo, with an ever-growing theme park nature of the venture

taking prominence and leading to a name change to Flamingo Land. In recent times the pendulum has swung again creating a more equal balance between animal and funfair attractions.

As part of the renewal of the Zoo area the aquarium exhibits were recently transferred from the Tropical House (the old tropical tanks here were a huge influence on my gaining an interest in the aquarium fish hobby and, in my younger days, I remember seeing my first Dwarf Gourami and Firemouth Cichlids here and the excitement of 'Marshall family visits' remains clear in my mind) to the area underneath the Sea Lion enclosure.

My friend Mrs. Jackie Goulder, looks after the 17 display aquaria, which vary greatly in size and dimension. So when Jackie offered me the chance of a behind-the-scenes visit, off I went, notebook in hand. I have to say that walking through the Zoo grounds on a dark January night with only a torch to guide us was quite eerie and hearing so many different animal sounds surrounding us was like being in a living Tarzan movie. Of course this is all routine for Jackie who, nevertheless, keeps a wary

watch should the neighbourhood tiger ever escape and this reminded me of that old Zoo joke, "What emerged from the tiger's enclosure in one piece?" - "The tiger."

Upon entering the aquarium, we are stood looking into a large exhibit that is home to several Pacu (listening to these fish crunching at Brazil nuts is an amazing experience), an exanthic Giant Gourami (who takes all the frantic activity around him in a very calm manner) and a very impressive large catfish.



Donated to the Zoo in 2000 this spectacular fish came as a 'Salmon Arius' but is unlike any Arius catfish I have ever seen so when Jackie supplied me with a few photographs I sent these, through the wonders of e-mail, to Y.A.A.S. catfish expert Mr. Steve Grant who believes that this fish may well be *Aspistor quediiscutis*? The favourite dinner of this catfish is chopped

marine fish with a lettuce side salad.

An equally large aquarium houses the first of two tropical marine exhibits. Shoals of Batfish, Green Scats and Finger Fish merrily swim around, and while we viewed these fish from the work gantry above their aquaria they ate lettuce like there would be no tomorrow.

Now no aquarium would be complete without its Red-Breasted Piranha and a frenetic rush to the surface broke the serenity of the 20 'friends' as their favourite food of chopped marine fish, fresh from the fishmonger, was added. Out of interest they are 'not alone' as a large *Hypostomus multiradiatus* has no fear of his illustrious companions, whilst some small Rosy Barbs, which arrived in the exhibit as eggs on *Vallisneria* plants that had been moved from another tank, darted in and out of the available cover looking for morsels of food. Jackie tells me that she can put her hands into the tank, when no food is still on the go, without any problems. But rather Jackie than me.

Soon we are onto the first of several cichlid exhibits. A beautifully crafted rocky aquascaped affair, it is home to a pair of *Neotemprologus brichardi* and so many variously sized

*Julidochromis regani 'kupili'*, with adult pairs which will not cease breeding (perhaps the raw carrot that a number of these fish nibbled on is the secret?), that you literally cannot see the water for fish. Just to add to the effect you will also find a couple of beautiful *Synodontis angolensis* here and a shoal of Blind Cave Characins.

Yes I am biased, as I gave Jackie the parents, but the sight of a number of *Cichlasoma sajica* fry been so carefully tended by their doting mother and father was a sight to behold. Often the fry of this particular cichlid will nibble at mucus produced on the bodies of their parents, in particular that of the male, during the early stages of fry rearing (as happens with *Uaru* and *Discus*). But such was the sparkling condition of their parent's skin that this did not appear to have occurred on this occasion? This was the second 'brood' brought off by this pair and a number of juveniles from their first successful coupling, which are housed 'off view', are now happily swimming around in one of my fish house tanks.

The next tank that caught my eye contained a strange mixture of fish. Much maligned Red Parrot Cichlids, which Jackie informs me have

produced fertile eggs since my visit, share their tank with more than one species of *Tilapia*. Housed with them is a *Leporinus fasciatus* and he is the 'old man' of the exhibit with a long serving member of the Zoo staff remembering his arrival in the mid-1970s.

By the time you read this report a 'pack' of *Anece splendens* will be on public show. If these particular fish did not have such a reputation for 'fin nipping' they would be the ideal viviparous fish for the home aquarium as they are so hardy and have doubled their number, seemingly leaving their fry alone, since first arriving at the Zoo.



The final tank contains young Seahorses, bred from parents that originated from the successful programme at

Chester Zoo. This was the first time that I had ever seen Seahorses actually eating and they made short work of live brine shrimp. Nothing is wasted and thus any shrimp not eaten by the Seahorses finds its way into the Batfish exhibit. Jackie would like to expand on the Seahorse exhibit in the near future and, when space allows, has plans for further marine displays.

Well done, Jackie not only for keeping all the exhibit tanks clean but also for the excellent

home-made information boards, complete with photographs, which Jackie took herself.

Out of interest Jackie tells me that the original goldfish pond, too dark for us to visit upon this occasion, that lies beyond the Tropical House is still in use and that in 2003 she found a large number of fry hidden amongst the reeds.

The aquarium at Flamingo Land is well worth a visit and sometimes you don't appreciate what is on your own doorstep.

### HOUNSLOW & SPASS DO IT AGAIN!

HOUNSLOW & D.A.S. and SOUTH PARK AQUATIC STUDY SOCIETY (SPASS) are delighted to announce that following the outstanding success of their two Shows held together last year, the decision has been taken to repeat the event this year.

So, for those fishkeepers of an exhibiting nature the opportunity to 'stir' your fishes' stuff' regardless of whether it's a tropical or coldwater species, the place to be is

Youth Centre, Kingsley Road, Hounslow, Middlesex  
Saturday September 18th 2004

Hounslow & D.A.S. Open Show for Tropical and selected Coldwater Fishes  
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SPASS Open Show for Coldwater and Amphibians plus Auction  
(Fish judged to IGS standards)

Schedules available early June



The White Paper

One new species (1964) of the South American Callichthyid

Genus: *Corydoras*

By  
Stanley H. Weitzman

National Museum of the United States  
Smithsonian Institution Washington D.C.

*Corydoras treitlii* Steindachner

FIGURES 1 and 2

*Corydoras treitlii* Steindachner, 1906, p. 478 (original description; type locality: mouth of a small stream emptying into the Rio Paranaíba at Victoria, State of Maranhão, Brazil).—Eigenmann, 1910, p. 403 (listed).—Miranda Ribeiro, 1911, p. 167 (description copied from Steindachner, 1906).—Regan, 1912, p. 210 (description copied from Steindachner, 1906).—Ellis, 1913, p. 407 (listed).—Gosline, 1940, p. 15 (aquarium specimen, no description); 1945, p. 74 (listed).—Stigebel, 1946, p. 129 (description of specimen from original collection).—Böhle, 1950, p. 27 (discussion of relationships with *Corydoras fawceni*).—Fowler, 1954, p. 67 (listed).

**LECTOTYPE**.—NMW 61103, standard length 42.6 mm., collected during 1903 by Franz Steindachner at mouth of brook emptying into Rio Paranaíba [Paranába River] at Victoria [Alto Paranaíba], State of Maranhão, Brazil.

**ADDITIONAL SPECIMENS**.—NMW 47798, paralectotype, standard length 42.4 mm., same data as lectotype; USNM 176912, standard length 52.5 mm., São Paulo, Brazil, Herbert Axelrod, 1958; SU 35054, standard length 47.0 mm., sent to the Division of Systematic Biology, Stanford University, by Mr. Fred H. Stoye in March 1937. Mr. Stoye stated that, according to Mr. N. Greim, this is an aquarium specimen from the Amazon. In my opinion this locality data is uncertain. This is the specimen utilized by Gosline (1940).

**DIAGNOSTA**.—*Corydoras treitlii* may be distinguished from other species of *Corydoras* by the following combination of characters: Snout long, about 30 to 32% of body length without head. Least caudal peduncle depth about 57 to 62% of snout length. Imbricated thoracic and abdominal plates absent; fine bony prickles present in these regions. Dorsal fin spine about equal in length to pectoral fin spine. Predorsal length about 79 to 89% of distance between dorsal fin origin and caudal fin base. Caudal fin without bars.

**DESCRIPTION**.—(For actual measurements see table 1.) In the description below, the proportions are given first, percentages follow in parentheses, both of which derive from standard length unless otherwise designated. Data for the lectotype, NMW 61103, is given first, data for NMW 47798 follows in brackets. Data for USNM 179612 and for SU 35054 are designated by respective abbreviations.

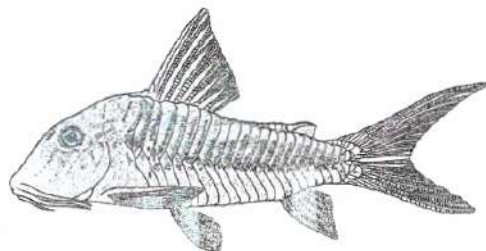


FIGURE 1.—*Corydoras treitlii* Steindachner, lectotype, NMW 61103. Standard length 42.6 mm.

Body fairly elongate, compressed posteriorly. Greatest body depth 2.9 (34.8%) [2.8 (35.6%)], USNM 2.8 (35.8%), SU 2.9 (34.4%). Least depth of caudal peduncle 7.5 (13.4%) [7.2 (13.0%)], USNM 7.7 (15.0%), SU 7.5 (13.1%). Distance between snout tip and dorsal fin origin 1.8 (56.4%) [2.0 (49.1%)], USNM 2.0 (51.0%), SU 1.9 (52.3%). Distance between snout tip and anus 1.9 (52.8%) [1.8 (55.0%)], USNM 1.9 (52.0%), SU 2.0 (49.8%). Anal fin origin to snout tip 1.3 (80.0%) [1.2 (80.8%)], USNM 1.3 (79.8%), SU 1.2 (80.6%). Lateral scutes 24/21 in all four specimens. Abdomen and thorax with small prickles in all specimens, no heavy imbricated plates. In SU 35054, a poorly preserved specimen, many of these prickles have been broken off in exposed areas but their bases remain. Azygous middorsal scutes 6 [4], USNM 4, SU 5, before adipose fin. One azygous scute before dorsal fin in all specimens. Pectoral fin base incompletely surrounded by coracoid in all specimens. Distance between coracoids variable (probably wider in females than in males) 19.9 (9.2%) [9.2 (10.9%)], USNM 11.3 (8.8%), SU 13.4 (7.5%). Head length 3.0 (33.3%) [2.9 (33.8%)], USNM 3.0 (33.3%), SU (34.2%). Greatest head width 1.4 (71.8%) [1.5 (68.7%)], USNM 1.5 (67.4%), SU 1.7 (50.5%) in head length. Least width of bony inter-

orbital 3.2 (31.0%) [4.0 (26.2%)], USNM 3.1 (32.0%), SU 3.5 (28.4%) in head length. Snout acute in dorsal view. Snout tip rounded in lectotype, much more acute in SU 35054 (a poorly preserved, dehydrated specimen). Snout 1.4 (70.4%) [1.5 (66.4%)], USNM 1.6 (64.0%), SU 1.5 (64.9%) in head length. Dorsal profile of snout slightly concave in all specimens. When directed posteriorly, both upper rictal (actually maxillary) and lower rictal barbels reach a point on a vertical about half an orbital diameter behind posterior edge of the orbit. Greatest diameter of bony orbit 3.8 (26.1%) [4.5 (21.7%)], USNM 4.1 (24.6%), SU 3.9 (25.8%) in head length. Greatest width of suborbital 2.3 (43.3%) [1.5 (67.7%)], USNM 1.4 (69.8%), SU 2.4 (41.1%) in orbit.

Dorsal fin I, 7, last fin ray split to its base in all specimens. Spine of dorsal fin when depressed reaching to, or slightly beyond, posterior termination of dorsal fin base, distant from origin of adipose fin. Adipose fin spine in orbit: 1.0 (97.4%) [1.0 (100.3%)], USNM 1.3 (70.0%), SU 1.2 (84.7%). Anal fin ii, 5, last ray split to its base in all specimens. USNM 179612 could be interpreted as ii, 6, last fin ray not split to its base. The last two ray elements of the anal fin in this specimen are well separated and probably each ray base belongs to its own separate pterygiophore series. Pectoral fin I, 10, [I, 11], USNM I, 10, and SU I, 10. Pelvic rays i, 5, in all specimens. Principal caudal rays 7/7 in all specimens. Pectoral fin spine (see fig. 2) with 16 [18], USNM 21, SU 16, stout spinules along its posterior border.

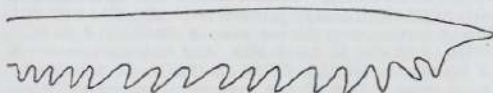


FIGURE 2.—*Corydoras treitlii* Steindachner. Pectoral fin spine of lectotype, ventral view, left spine.

**COLOR**.—The lectotype has the following color pattern in alcohol (see also fig. 1): Basic body color yellowish gray. Head with brown markings as shown in figure 1; no punctate or varmiculate markings over snout or head. Sides with purplish dark brown markings on upper body scutes. All specimens with all fins hyaline, completely lacking bars, bands, or blotches. All specimens with color pattern very similar to lectotype except that SU 35054 greatly faded. Color in life not known.

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www.tetra-fish.co.uk

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## Stoneworts (*Chara* sp.)

*The most threatened group of plants in Britain are stoneworts, yet most people know little about them, naturalist included!*

The stoneworts, or Charophytes, are easy-to-spot algae that typically colonise bare substrates at the bottom of freshwater or brackish pools, lakes, ditches and other water bodies. They frequently act as pioneers, forming dense underwater "meadows" before succumbing to the more vigorous growth of flowing water plants. About 30 species have been recorded in the British Isles, and most have rather exacting requirements, restricting them to somewhat quirky habitats such as coastal bodies of water, fenland peat pits/ditches and seasonal pools or meres. As a result the majority have always been somewhat restricted in Britain, with some confined to just a handful of sites. Indeed, of the 30 or so sites in the UK, no fewer than 23 are either nationally scarce or rare (78%) and many are declining fast.

12 species are now priorities for conservation action as part of the UK's Biodiversity Action Plan (BAP) process. Part of the catastrophic decline in stoneworts has resulted from the natural overgrowth and infilling of the water bodies they favour. With the cessation of activities such as small-scale peat cutting, the sympathetic clearing of fenland ditches and the watering of stock at small ponds, as those found on heaths and commons, so habitats have become overgrown, with transient stoneworts often the first plants to disappear. Fortunately the "lost" species can stage amazing comebacks if their former habitats are restored sympathetically. They do this from sere banks buried in the mud.



It was particularly nice to see a pond crammed with Strawberry stonewort (*Chara fragifera*), plus other local and rare vascular plant species such as Pithwort (*Ptilularia goiculifera*) and Shoreweed (*Littorella uniflora*) on heathland "downs" above Kynance Cove at The Lizard, Cornwall in May 2003, where none had been seen for decades. Here as part of English Nature's programme of heathland grazing restoration, the formerly overgrown pond in question had been cleared merely for stock watering about seven years earlier with these staggering results.

Nutrient enrichment-eutrophication probably poses a greater threat to stoneworts. These plants are highly sensitive to many forms of water pollution, such that stonewort populations are largely confined to unpolluted waters. They have been linked to canaries down the mines for good reason, as they are often the first plants to disappear as water bodies become polluted. This has been the single biggest cause of loss to the populations of UK BAP stonewort species.

For the past year Nick Stewart, Britain's stonewort expert, has been drawing up a list of the most important sites for conservation, and in

consultation with the UK Stonewort Steering Group. So far approximately 120 sites have been described, using many species with outstanding assemblages, are exceptional stonewort habitats. The sites range from small water bodies of importance for singly highly threatened species, or like those found in a scattering of clay pits across Inglesstone Common, Gloucestershire, noted for their thriving populations of tassel stonewort (*Tolypella intricata*).

Coastal waters as far afield as Uist and Sliapton Ley, Devon, plus the man-made water bodies such as the Peterborough brick pits are of exceptional importance for the Bearded stonewort (*Chara canescens*) while extensive areas of semi-natural vegetation such as that found at The Lizard and the New Forest have long been noted for their rich stonewort floras.

*Editor: Reports are being widely distributed to both site managers and policy makers. We hope that it will go a long way towards putting the spotlight on this fascinating group of plants and the places where they grow.*

*Andy Byfield is "Plantlife's Biodiversity Programme Manager.*

## CAN YOU SOLVE THIS MYSTERY?

Two or three months ago, Portsmouth A.S members Wally Ryder and sister Win noticed a small brown cloud in one of Wiri's 24 x 15 x 12 tanks.



morning



evening

In the mornings it was up under the surface, later in the day it sunk to the middle of the tank and, in the evening, it was on the bottom.

They think it is some form of infusoria, but which one? Where it came from they don't know; nothing had been added to the tank, except food (no live food); the only fish in the tank were six Black Neons.

The cloud grew in size until it filled half the tank, so Win took some out and put it in another tank, but it didn't 'take' so the first tank was cleaned out and set up again. Since then, the cloud has not appeared.

Three or four weeks ago, a small cloud appeared in one of Wally's 24x12x12 tanks. After a couple of weeks it was so thick he couldn't see the plants - only the fish (six small Danicos and three Chained Loaches) when they came to the front glass! The fish didn't seem to be affected by the cloud and Wally put some in another tank where it disappeared, presumably eaten by the dozen or so Mosquitofish in the tank.

The photos give some idea of the problem but what it is, where it comes from and what it feeds on is the mystery we're hoping you can solve!

Answers to the Editor (address inside front cover)

## INTERPET

Interpet has launched 2 new aquarium filters to meet the needs of even the most delicate fish species.

Filtration is the key to a successful, healthy aquarium and critical factors to consider are; maximum efficiency, media surface area and flexibility and pump flow rate. Both sizes of Bio Filter offer high specification and will cope admirably with even the heaviest stocking levels for the appropriately sized aquariums.



Bio 50 is suitable for aquariums for up to 200 litres / 45 gallons, while the Bio250 is ideal for larger aquariums and is suitable for capacities up to 450 litres/100 gallons.

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1 Patented  
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Consumer 18 001 04



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For those consumers with less messy fish, or those who wish to "polish" the water one of the foams can be replaced with Interpet's Biomedica fine foam. If aquarium treatments are being used, the carbon foam can be removed and replaced with one of the 3 grades of foam block available as spares.

Both models of Bio Filter have a dedicated space allocated for a heater. A removable intake strainer is supplied in cases where the heater is taller than the filter, making the whole unit completely versatile.

As with all Interpet products, the Bio Filter is well thought out, well constructed and contains comprehensive instructions.

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### Know your Fish

*Poecilia velifera* (Regan) 1914  
&  
*Poecilia latipinna* (Le Sueur) 1821

Popular name: Sail-fin Molly

Habitat: Central America, Mexico, Yucatan.

**Characteristics:** The male *P. velifera* has an extremely large dorsal fin with a long base containing 18/19 rays. In showing this species the dorsal should be held erect to gain high points. Caudal fin rounded and well spread but not symmetrical, lower rays extending to a spike-like extension. Pectoral and pelvic fins rounded. The anal fin adapted to form a fully developed gonopodium.

The male *P. latipinna* whilst also having a large dorsal fin, differs from the above species with a lower ray count of just 13/16 rays. Once again show fish should hold this fin erect. Caudal fin rounded and well spread. Pectoral fins rounded, pelvic fins are pointed. The anal fin adapted to form a fully developed gonopodium.

Colouring similar in both species being blue-green to brown, with a pearly iridescence that is less intense in *P. latipinna*. The body colour often contains 4/5 faint transverse bars at a level of the pelvic fins. Dorsal and caudal fins may at times contain an orange border.

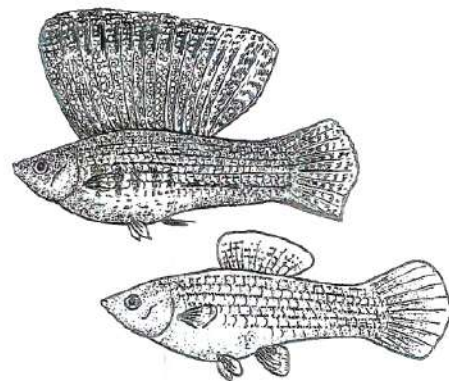
Other colour varieties in *P. velifera*: albino with pink eyes plus a gold variety. Colour varieties *P. latipinna*: black with distinctive orange border to the dorsal fins top edge plus speckled variety.

Both the females of *P. velifera* and *P. latipinna* are similar having a short natural looking dorsal fin, which is rounded. Pectoral, pelvic and anal fins rounded. Colour much as in the males, but less intense.

**Remarks:** Both male and female of these species should be deep bodied and robust in appearance. In the genus *Poecilia* there are many hybrids and care should be taken when purchasing these species and breeding them.

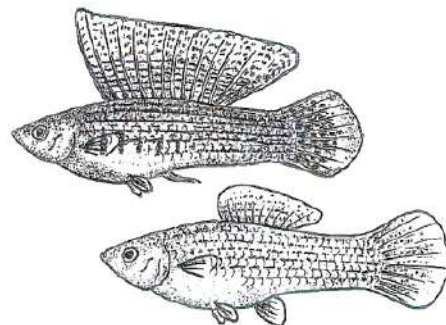
Class S FBAS FISH GUIDE

1.  
2.



*Poecilia velifera* (male top)

1.  
2.



*Poecilia latipinna* (male top)





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## FBAS help & advice

**Q.** I have a pair of Dwarf Gourami in my 3. foot community and the male of late is always blowing a bubble nest. He chases the female all round the aquarium, but she seems reluctant to join him under the nest. Will they eventually spawn or should I set up a second tank for them? I have recently joined a fish club and all the members are very helpful. We talked about putting the male of the pair in the club's table show, but a member told me that the diagonal bars in the male have to be unbroken to gain high points.

**A.** Your pair of Dwarf Gourami (*Colisa lalia*) certainly seem prepared to spawn, or the male at least seems keen. Yes it would be best to set up a second aquaria, an 18"x10"x10" would be ideal. The water need only be a little above 6" deep with a pH of 7 would be desirable, but not always important, it depends on the conditions the adults are used too. The temperature should be as close to 80°F as you can get it. Throw in plenty of plants, so they float on the surface, this helps the male with his nest building and a chance for the female to shelter if the male gets too aggressive. Now the female will not

be a willing partner if the conditions do not suit her, as in your community aquarium. Secondly and more important she must be in breeding condition, this can be done by feeding her on live foods such as bloodworms, *Tubifex* or *Daphnia*. When her tummy starts to look full with eggs you can introduce her into the aquaria with the male. After many embracing movements spawning will be over and the female should be removed carefully.

The male will carry on looking after the eggs that are in the nest and replacing bubbles that burst. Your aquaria needs an almost air tight lid of glass top as cold draughts blowing across the surface will harm the hatching of the eggs of even kill off the very young fry. After about 48 hours with the help of a magnifying glass you can see the young looking like a tooth brush hanging out of the nest and a few days later can be seen darting about. At this stage they need the finest of foods like infusoria and it is now time to remove the male, just in case he starts eating them, that reminds me don't forget to feed the male during this time, possibly with *Daphnia*.

I am pleased you have joined a club, you will certainly pick up a lot of tips. However just enjoy showing your fish a let the judge do the comments on your entries and I think you will be pleasantly surprised. The diagonal bars in your male *Colisa lalia* do not have to be unbroken, although it may be desirable. The bars cannot be "out bred" or "in bred" so you have no control over these bars and it is only a matter of personal taste.

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## Derek Lambert



Derek Lambert, although taken from us so suddenly and at such a young age, nevertheless managed to pack in an awful lot of fishkeeping into his life.

He began around the age of 11, as a junior member of the Kingston Aquarist Society based in South-west London. After a few years on the competitive scene, he turned his interest to Livebearers – an aspect of fishkeeping that he made his own speciality.

He authored several books but his real forte was getting his hands wet, delving into the natural waters of his beloved fishes mainly in Mexico, Jamaica and, just recently, Cuba.

When "The Aquarist & Pondkeeper" magazine was seeking a new Editor in 1999, Derek fitted the bill perfectly. He brought the same zeal and organisational abilities that he had refined whilst heading up the 'Viviparous' specialist livebearer Society to this 'office job' and quickly produced a magazine which was both authoritative and entertaining at the same time.

For such an eminent aquarist - he was in great demand as a lecturer, visiting many countries and meeting hundreds of aquarists in the process - Derek was still able converse with every level of fishkeeper, from novice to expert, yet was always ready to admit he was still learning.

We feel especially sad for his mother, Pat, his companion on many a field trip and constant support through the years. Can there be anything more distressing than for a mother to lose a child?

In today's 'instant' society where it seems that the younger person is not willing to get too actively involved in anything practical, Derek could be seen as an exception; his departure will leave a void that will take some filling.

An excellent representation of fishkeepers, aquatic manufacturers and publishers attended Derek's funeral in Lincoln on March 1<sup>st</sup> and supported Pat Lambert and Wifif in their loss.



## FBAS VIDEO INFORMATION UPDATE

If you missed the lectures at Bracklesham Bay last October, 'catch up' now, as ALL lectures are **NOW AVAILABLE**



Brian Walsh - Aquatic Sculptures



Juan Miguel Artigas Azas - Firemouth & Other Thorichthys



Dr Peter Burgess - Fish Health



Juan Miguel Artigas Azas - Goodeidae



Rupert Bridges - Basic Pond Care

Details from:

**FBAS AQUATALKS OFFICER**  
Tel: 01753 882873

## NEW VIDEOS

The following two new videos have been added to the ever-growing list of titles from the FBAS.

### V.30 NOT ONLY HOSTAS, BUT ALSO.....



The *Hosta* family is often thought to provide ideal pond-side 'furnishings'. Mike Shadrack disagrees but still includes some in this photographically stunning presentation of bog garden ideas. There are plenty of recommended water gardens for your Society to visit and, what everyone wants to hear, the solution to the 'Hosta Slug Problem!'

Running time: 39 minutes. (TSS plus live video)

### V.31 MAINTAINING AQUATIC EQUIPMENT



Although extremely reliable, today's aquarium equipment may still need regular maintenance and occasional replacement parts to remain in optimum condition. Watch Hounslow members take a number of pieces equipment apart, clean and re-assemble. You can learn a lot by watching other people's 'hands-on' experiences!

Running time: 63 minutes.

Both videos available from :

**FBAS AquaTalks Officer (tel: 01753 882873)**

## PLANTING-UP TIME by Jack



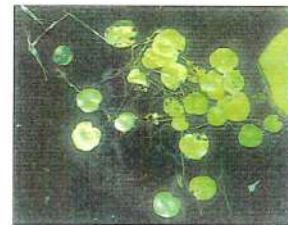
Arum Lily

They say 'Schooldays are the happiest days of your life.' Well, when I was at school being taught Latin I didn't realise that years later I'd be using it on such a regular basis.

Gathered from a variety of reference books, I have "Gone back to School" and assembled a list of pond and marginal plants' names, together with their Latin equivalent.

Angel's Fishing Rod  
Arrowhead  
Arum Lily  
Avens  
Bog Arum  
Bog Bean  
Bowles' Golden Grass  
Branched Burr Reed  
Brandy Boitte  
Brass Buttons  
Brooklime  
Buck Bean  
Canadian Pondweed  
Cape Pondweed  
Colton Grass  
Creeping Jenny  
Curled Pondweed  
Duck Potato  
Duckweed  
Dwarf Bullrush  
Fairy Moss  
Flowering Rush  
Fringed Water Lily

Diarrama pulcherrimum  
Sagittaria latifolia  
Zantedeschia aethiopica  
Gerum rivale  
Calla palustris  
Menyanthes trifoliata  
Carex elata 'aurea'  
Sparganium erectum  
Nuphar lutea  
Cotula coronopifolia  
Veronica beccabunga  
Menyanthes trifoliata  
Elodea Canadensis  
Aponogeton distyachos  
Eriophorum angustifolium  
Lysimachia nummularia  
Potamogeton crispus  
Sagittaria latifolia  
Lemna minor  
Typha minima  
Azolla caroliniana  
Bulmus umbellatus  
Nymphaoides peltata



Frogbit

Frogbit  
Golden Club  
Great Reed Mace  
Hairgrass  
Homwort  
Horsetail  
Jesus' Nut  
King Cup  
Knotweed  
Lizard's Tail  
Marsh Marigold  
Marsh St John's Wort  
Myrtle Flag  
Parrot Feather  
Pickereel Weed  
Ragged Robin  
Sacred Lotus  
Skunk Cabbage (white)  
Skunk Cabbage (yellow)  
Starwort  
Stonewort  
Swamp Lily  
Sweet Flag  
Sweet Galingale  
Taro  
Umbrella Grass  
Umbrella Grass

Hydrocharis morsus-ranae  
Orontium aquaticum  
Typha latifolia  
Eleocharis scicularis  
Ceratophyllum demersum  
Equisetum scirpoides  
Trapa natans  
Callitha palustris  
Polygonum bistorta  
Saururus cernuus  
Callitha palustris  
Hypericum elodes  
Acorus calamus variegatus  
Myriophyllum aquaticum  
Pontederia cordata  
Lychnis fluscuculi  
Nelumbo nucifera  
Lysichiton camtschatcensis  
Lysichiton americanus  
Callitriche verna  
Chara vulgaris  
Saururus cernuus  
Acorus calamus variegatus  
Cyperus longus  
Colocasia esculenta  
Cyperus involucreatus  
Cyperus laterifolia





Water Soldier

Water Buttercup  
Water Chestnut  
Water Dragon  
Water Fern  
Water Forget-Me-Not  
Water Hawthorn  
Water Horsetail  
Water Hyacinth  
Water Lettuce  
Water Plantain  
Water Poppy  
Water Rhubarb  
Water Soldier  
Water Strawberry  
Water Violet  
Weeping Sedge  
Willowmoss  
Yellow Flag  
Zebra Grass

Ranunculus aquatilis  
Trapa natans  
Saururus cernuus  
Azolla caroliniana  
Mysotis scorpioides  
Aponogeton distyachos  
Hippuris vulgaris  
Eichhornia crassipes  
Pistia stratioides  
Alisma plantago-aquatica  
Hydrocleys nymphoides  
Gunnera maculata  
Sagittaria arifolia  
Hydrocharis morsus-ranae  
Hottonia pelustris  
Carex pendula  
Fontinalis antipyretica  
Iris pseudacorus  
Scirpus lacustris tabernaemontani

## Know your Plant

*Lysichiton americanus*



Common name: Skunk Cabbage (Yellow)

**Description:** Marginal plant suited to the outer edges of the pond. Cabbage-like in appearance with leaves that are large. Colour light green darkening with maturity; dark coloured blotches are also present. Large yellow flowers appear in early Spring and give off the unpleasant smell to which the plant's common name refers. Long after the flower has gone, the large stamen remains eventually turning into a seed head.

**Remarks:** The Skunk Cabbage like to grow in full sun with its roots in heavy loam-like soil that is just below the water surface of the pond. This plant propagates from seed.

There is also a white flowering Skunk Cabbage (*L. camtschaticensis*) that is less vigorous than the more common yellow-flowered species.

As a hardy perennial, it will die back completely during the winter but improves with each season that it re-appears.

## Where are they Now

### Hendon and District Aquatic Society

The story of the formation of Aquarist Societies in this country goes back to 1938 when the FBAS had the support of about 13 clubs. With the end of the 1939/45 War, over weary people wanted to get back to their hobbies.

In 1948 Roy Skipper placed an advert in a local Hendon newspaper with the intention of forming a fish club. The new club was called the Hendon and District Aquatic Society. By 1956 Hendon had held over 400 meetings and 8 annual shows. Their members also attended the Hendon Park Show with displays of tropical and coldwater fish. Hendon also participated in the North West London Group of Aquarist Societies with shows held under FBAS rules.

Hendon fish club was most famous with hobbyists for running an annual Dinner and Dance where members from other aquatic societies along with their friends attended. However above all the Hendon Convention was a must, in every aquarist calendar. Attendances were at times well over 400 people. Guest speakers were invited to lecture from all over the world. Some of the most notable being: Arend van den Nieuwenhuizen from Holland, one of the worlds foremost fish photographers, I remember his pictures of a breeding sequence of the "splash tetra" (*Copella arnoldi*) were truly spectacular at the time. Prof. Herbert R. Axelrod Author of many books on fish and the man behind world wide TFH Publications came over from the States and gave the '1977 congress. Prof. Conde' of the Nancy Aquarium in France was also a speaker in the early seventies. Bill Tomey also from Holland gave the first of two of the best conventions with his excellent photography of fish and their habitat. In return Hendon travelled to Holland, Belgium and France, they gave their clubs illustrated lectures.

In common with other societies Hendon also supported the meetings of the British Aquarist Study Society that held their meetings at London Zoo and formed long term friendships with such people as Ron Forder of Uxbridge AS, Adrian Blake of Basingstoke and Mike Shadreck of Ilford, who now devotes his time to growing hostas. Henry White the President of Hendon was also very proud to be made President of BASS at this time.

Founder member Roy Skipper was the first person in Europe to breed and raise Discus in 1956, with his wife Gwen he opened the "House of Fishes" in Hemel Hempstead where you could see his famous 7-colour discus that he was breeding and selling.

Richard Sankey was a young Hendon member who later started the "Tropical Marine Centre" which became one of the largest (if not the largest) tropical marine wholesalers in this country.

John Chambers was a junior member also, who now with his son runs "Hobby Fish" at Milton Keynes, along with his venture of running boat trips up the Amazon.

Derek and Pat Lambourne were Hendon members who founded the Catfish Association of Great Britain that had 1,000 members at its height in popularity. They are now living near St. Austell in Cornwall.

Tom Glass, the European representative for the FBAS for many years, and later became Chairman of the Association of Aquarist, was known by all within the hobby and lectured to many clubs on Killifishes. Tom still lives just off the Portobello Road in West London.

Malcolm Goss was a Hendon member who has worked hard for the hobby over many years and in a number of capacities. He is now the editor of this journal.



David Allison, Bernard and Celia Mould with Henry White

With falling membership and rising cost Hendon A.S. had to wind up in the late eighties. Henry White, David Allison along with Bernard and Celia Mould still meet on a regular basis to talk fish, photography and share their continuing interest of all things in the natural world.

Henry White 10<sup>th</sup> February 2004.







than animals with backbones, and the water was occupied by fish with bony skeletons and fins with hand-like bone structures that were to evolve into vertebrate limbs.

Dr Coates and colleagues Neil Shubin and Edward Daeschler believe the fossilised bone found in Pennsylvania helped the forelimb fulfil an intermediate function between the braking and steering of a fish's fin and the walking movements of an early amphibian.

Drs Daeschler and Shubin found the fossil in 1993 when they were excavating near the highway but it took nearly eight years to discover its importance.

"We found a number of interesting fossils at the site," Dr Daeschler said. "But the significance of this specimen went unnoticed for several years because only a small portion of the bone was exposed and most of it lay encased in a brick of red sandstone."

After the bone was fully excavated, its true significance quickly became apparent. Dr Shubin said. "We knew it was a humerus, but it was an entirely different kind. We had never seen one like it before. It's a

mosaic of primitive fish and derived amphibian."

Jenny Clack, a vertebrate palaeontologist at Cambridge University, said the primitive forelimb could have propped the creature's head out of water to allow it to breathe air, or it could have been used to anchor the animal in fast-moving water, Dr Clack said. "It begins to fill in the picture about what we think about the transition. The difference between fish and these early tetrapods is becoming increasingly blurred."

The same palaeontology site in Pennsylvania has yielded two other types of tetrapod living in the Devonian period, Dr Clack said. "If this is really a third form, it hints at a wide diversity of tetrapods existing in close proximity, in what is emerging as one of the richest and most varied of any late Devonian vertebrate site," she added.


The scientists who have excavated the Pennsylvania site said it contains fossils of other plants and animals that suggest the area was "teeming" with life more than 360 million years ago.

'The Independent' 2/04/04

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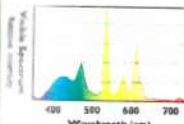


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## Monsters from the deep - with the sex lives of vampires

by Kathy Marks in Sydney

Scientists from Australia and New Zealand have identified more than 100 new species of fish in the waters that divide the two countries.

The Tangaroa, a deep-sea research ship, probed the Tasman Sea for four weeks year, snaring 600 species of fish and 1300 species of invertebrates. The 24 researchers also found the fossilised tooth of a Megalodon, an extinct shark that was twice the size of the Great White Shark.

The project, funded by Australia's National Oceans Office and New Zealand's Ministry of Fisheries, uncovered weird and wonderful sea dwellers, including fish with tongues covered, in teeth and fish with hinged teeth that enable them to swallow large meals.

Another creature, the Pacific Spook-fish, uses its long snout like a metal detector to search out the electrical impulses of prey concealed in the seabed.

Among the other species hauled in from more than a mile beneath the waves was the Dumbo Octopus, which actually navigates through the water with

the help of a pair of flaps. According to Dr Mark Norman, a senior curator at Museum Victoria, it looks like "the cartoon character Dumbo the flying elephant".



Deep Sea Anglerfish

One of the most curious discoveries made by the scientists concerned the mating habits of the Deep Sea Anglerfish. Dr Norman described the female as being the size of a tennis ball, with "big savage teeth, little nasty pin eyes... and a rod lure off the top of her head with a glowing tip to coax in stupid prey", while the male looked like "a black jellybean with fins".

During copulation, the male bites the female and hangs on. "He drinks her blood in return for giving her sperm," Dr Norman told The Sydney Morning Herald newspaper. The flesh of the two fish then fuses together and they remain permanently connected. "It's like sexual vampirism," Dr Norman said. "We found females with up to six males attached."

Scientists from 11 research organisations took part in what is the first detailed survey of the

deep sea life around the submerged mountains of the northern Tasman Sea. Dr Norman said that more than 100 of the species discovered were either unrecognised or new to science. Others had been spotted only a few times in the past.

In one cup of sand, scientists found 250 species of tiny snails. They found giant sea spiders, which bear little resemblance to land spiders, having such small bodies that some of their organs are situated in their legs.



Fangtooth

There was also the intriguing Fangtooth, with two sharp teeth that poke out of its bottom jaw and slide into pockets in its head.

Among the new species identified was a deep-water Batfish that walks along the ocean bed. Dr Norman said: "Their fins are almost modified into legs, and the head comes to a point like a unicorn. It's pretty weird."

'The Independent' 23/03/04

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