

ONLINE EDITION No.6 MAY 2014



A magnificent Bubble-eye from our NGPS Open Show Class 17 Click/tap to download for the May Meeting minutes, National

Standards news and our regular article for Goldfish lovers.....

### Meeting News May 13<sup>th</sup> 2014

This meeting was a live fish show&tell and Tom Hindley brought some unusual Calico Wakins, plus one Calico Fantail he had discovered at Dave's Aquarium, Bolton.



Richard Rizzotti also brought some Black Moors but no aquarium – they were in a black bucket, so no photograph – impossible to see them!

Eric Hutchinson reported that he was changing his pond and fish house design and so had some equipment for disposal – details of the pond gear next meeting. Currently he has two 4 foot tanks (either 15 or 18 inches deep) that are free if collected – ring him on 01942 2894969.

Some good Orandas were seen at World of Water, Altrincham and (genuine) Black Goldfish at Amazon Aquatics in Leigh.

Member Bill Nolan is moving from Sale to Bolton and cannot take his basement Fish House – so it will be dismantled and if you want any equipment or tanks please contact him on 0161 9738259.

Spawnings were reported to be very good. Sherridan had day-long activity with Veiltails, Lionheads and Pompons. Richard also reported spawnings of Black Moors and Ranchus but then lost all over two days.

Discussion of this catastrophe revealed that the system was new and

had a drip-feed into just two tanks (for many hundreds of fry). Hence the problem could be residual chemicals from the installation, chlorine from the drips, overcrowding, or even disease from the live foods used.

David Roberts insisted that high-tech equipment was not effective for raising fry. Lots of tanks for dividing fry into small lots (or early rigorous culling) with just bubble-up foam filters and hand siphoning with just airline tubing, with top-up via aged water was best. Lots of min-feeds with freshly hatched Brine Shrimp followed by ground flake were best.

Richard hoped for more spawnings and will apply all these ideas....

Tom Hutchinson won the room prize of Aquarian© Flake Food.

Next meeting is June 10<sup>th</sup> at The Church Inn, 8pm as usual, where Richard will report his ideas as Development Officer and Sherridan will issue the new printed Newsletter for members without Internet access.

### Nationwide Report

A further meeting will take place at Coventry on May 17<sup>th</sup> where final decisions will be made on the Nationwide Open Show, date and venue.

These will be reported in the June issues of the Online and printed Newsletters.

## Members Report

Our President Bill Ramsden suddenly developed Pneumonia and had to be rushed to the Bolton Infirmary's High Dependency Unit. The doctors report that quick application of powerful antibiotics has actually cured that pneumonia but it has left him very weak. He is due for release from hospital soon but will need home care. A get-well-soon card from members should await his return – send to Mr W. Ramsden, 18 Ainsdale Road, Bolton, Lancs BL3 3BY.

His Vice President David Ford reported that just before his illness he completed a DVD about his fish-house and thoughts on a lifetime of breeding Show Goldfish. This was handed-out to attending members and Sherridan will send copies to the other Goldfish Societies.

#### Our Article for Goldfish Lovers

#### DIY LEDs by VP David Ford

The latest innovation for aquarium lighting is the use of LED bulbs. These 'Light Emitting Diodes' are also known as SSL (Solid State Lighting) where a semiconductor is given a voltage drop that makes electrons move to a different state, emitting a photon (light particle). No need for an expensive vacuum bulb and the short-life incandescent filament that makes the aquarium cover hot, or the complex and heavy fittings of the fluorescent tubes.

Ideal! Unfortunately they emit light of a particular wavelength (known as 'colour temperature') and plants need a range of colour temperatures for photosynthesis. Hence, when aquarists fitted the cool and cheap LEDs the plants started to fail.

Now a range of LEDs covering different spectra mounted into overhead units with built-in transformers, are available, but all this is expensive – very expensive. LED light penetration into the water is also low so such units are best used over Nano-tanks and Biorbs etc.

If you have a small aquarium – especially if it is a Goldfish tank with plastic plants – there is no need to buy these expensive special units...do it yourself with domestic LEDs.

#### **IKEA LEDs**

The cheapest LEDs I could find are at IKEA where units are designed for kitchens or lighting shelving.



Called 'Dioder' in Swedish, these are available in various forms at £30 for sets of four. They are 12 volts and include a transformer for 240 voltage mains use.

The unit I like is the one with multi-colour LEDs and a control unit for changing the colour in sequence or continuous lighting....





My small aquarium is a  $50 \times 30 \times 25 \text{cm}$  tank – Chinese made and very cheap. It has a fluorescent light (Sun-glo 15w T8) built into the plastic hood. Very bright, probably very good for the plants, but far too bright for the Goldfish in the aquarium. The flickering start-up also caused panic. Hence I decided to replace that tube with the IKEA LEDs.

How to mount the LEDs depends on your aquarium design, they need to be near the water, but not in it! I decided to add a condensation tray and just place the LEDs thereon. They only get warm, not hot, so they will not melt the plastic sheet used for aquarium condensation trays. The transformer is dangled behind the stand and each of the four LEDS held in place with sticky tape. The unit chosen was also the multicoloured one so the aquarium could be lit in a variety of shades — or continuously changing via the control unit. Just for the delight of visitors; the fish do not seem to care. But the initial lights-on causes no stress.

The colour changes can be seen below.....









# **LEDs for Large Tanks**

The same system was used for my 4 foot aquarium but with bright light LEDs from IKEA called INREDA – these are more expensive at £45 for four and two sets were needed to illuminate a 4 foot aquarium. The ones shown below are 6 watts output and a very bright white light that penetrates the 15" depth.



As shown below, the aquarium has plastic plants too because it is a Goldfish aquarium, however, I am adding Elodea planted in the sandy base to see how they grow under the LED light...will report results later in the year.



The aquarium has a built-in condensation tray which remains in place when the lid is lifted...there is a feeding hole. Hence the LEDs are simply placed on that tray with the transformer hidden behind the base unit.

Hence you can have LED lighting that costs tens rather than hundreds of pounds if you are prepared to DIY.

