

**NORTHERN GOLDFISH  
& PONDKEEPERS  
SOCIETY**  
A Nationwide Society  
**NEWSLETTER**



Online Version

November 2015



Our Social Weekend in Llandudno this year saw Ian Mildon, Graham Turner, Bob Jones, Sherridan Moores, Dean Roberts and David Ford (behind the camera) visiting SeaQuarium in Rhyl...see the Social Events (Page 8) in the full NGPS website for more photographs.

### **Tip of the Month**

Last month Bill recommended his treatment for removing mucous from fish before showing. This brought a response from our member in Hawaii, Steve Hopkins of Raingarden Goldfish....

"With reference to stripping the mucous off a goldfish....

First, why would you want to do that? The mucous coat is the fish's first line of defence against opportunistic pathogens. Terramycin has some medicinal uses, but it would be risky to use it for cosmetic purposes. As noted, hydrogen peroxide is safer if you are very careful with the concentration but it will oxidize the surface of the gill lamella too. Potassium permanganate is safer still and a concentration 0.75 ppm is enough. Salt will also cause the mucous to slough off."



I (David Ford) have found another aspect of this 'problem'. Adding a new multi-coloured LED lighting to my aquarium showed my baby Ranchu had Fungus when viewed under its blue light option. Closer inspection showed it was not Fungus, but normal protective mucous which, being biologically active, fluoresced under the new light. Don't treat!

## Members Write

Steve also commented on Alex's Part 1 article....

"I do not like the name "common" either and use the Japanese name "hibuna" which translates to "red fish". But, we prefer the red/white ones with an interesting pattern over the self-colored (Ed note: Steve is American!) full red. We use the terms "variegated" or "piebald" to describe metallic red/white (or red/silver) goldfish. We use the term "nacreous" to describe a mixture of metallic and matt scales, so "nacreous" is synonymous with "calico".

My theory is that goldfish are able to manufacture a limited amount of red pigment which, in turn, limits the intensity of red colour in self-coloured (full red) individuals. The fish is not able to manufacture enough red pigment to completely mask yellow pigments and the overall appearance is orange. When there is a variegated pattern with red confined to discrete patches in a field of white/silver, the fish still manufactures the same amount of red pigment but the red pigment is now concentrated into a smaller area. The higher concentration of red pigment allows the red to completely mask the yellow so it is a more intense red."

Now to continue with the next article in Alex Stephenson's series....

## Goldfish Unlimited

*Part 2 of 4 pieces looking at some of the popular goldfish varieties.*

### The Calicos

We all know what a Shubunkin is – don't we?

Well, in Britain they can be divided into three main types. First there is the London Shubunkin which has the same conformation as the common Goldfish and differs only in colour. Second is the Bristol Shubunkin which has more finnage and, in particular, a large rounded caudal fin (tailpiece). Anything which carries a tail as big as this need more muscle power at the back end, and so, many Bristols are stockier as a result. The third Shubunkin is the one often called the Calico Comet as, ideally it will have the same Conformation as a good metallic Comet. The majority of Shubunkins imported into this country are commercial versions of this last type.

Shubunkins are not the only Goldfish varieties to have Calico, or, to be more correct, Nacreous colouring. Many other types have a Calico version as well. So, why do these fish display Nacreous scaling and so many individual colour patterns? Well, it is all in the genes, just like everything!

A normal Goldfish has a full complement of reflective material called Guanine, which is evenly distributed and gives the fish a metallic appearance. However, there are other Goldfish which have no Guanine. These mutations, having no reflective material, are referred to as matt. For some reason, not yet understood, (at least by me) these matt fish usually have no colour pigments either. The result is normally a pinky-white fish with black 'button' eyes. Now, a nacreous or calico fish is somewhere between these two, having varying amounts of Guanine at different levels within the body wall. Also, with a little bit of luck, these nacreous fish will possess a full complement of colour pigments, unevenly distributed, to give a pleasing colour pattern.

As in all matters genetic, the reality is complex but the principle is fairly simple. A fish inherits half its genetic material from one parent and half from the other, so, this is how the system works. One way to produce nacreous fish is to use one metallic parent and one matt, whichever genes are inherited, the result will be nacreous offspring. However, due to other genetic factors, these offspring may not inherit the desired colours.

The way most breeders produce nacreous fish is by using parents who are themselves both nacreous. This produces a result where 25% of the young will be metallic, 25% will be matt and 50% will be nacreous. These nacreous offspring



having a good chance of inheriting the required colours. With this type of spawning, most breeders will cull the metallic and matts. The retained 50% are then grown on to be sorted and selected for quality later.

Goldfish only have three pigments, red/orange, yellow and black, but by mixing these at different levels in the body wall, several other colours can be produced. For example, black, deep in the body tissue, together with some guanine, appears blue. A good blue is highly regarded as a background colour in all calicos.

What most breeders aim for are fish with a base colour of blue, with patches of as many other colours as possible, in a pleasing pattern. Then the whole lot speckled with black. This is quite a feat in itself and, when you remember, this has to be achieved at the same time as all the other requirements of body shape and finnage etc., you will begin to realise how hard it is to please Goldfish Fanciers.

An interesting thing about nacreous fish is that the colours are not fixed and can change throughout the life of the fish. Some strains have a tendency to fade, while others can darken. It is not unusual, for instance, for fish with a lot of speckles, for these to spread and make the fish mostly black. In other cases, fish which have plenty of blue and black, might gradually lose these altogether. When this happens, there is a possibility that a red metallic fish has been used in the strain. Remember metallic have a decolouring gene so they turn red by losing the black pigment.

Sunlight is generally thought to be essential for good colouration. However, fish kept in outdoor ponds must have access to shade. Not providing this may be a form of cruelty. Furthermore, because calicos have less reflective material, they are likely to be most affected. I tried putting sun cream on them, but they didn't like it (joke).



Member Alan Ratcliffe has bred many prize-giving London Shubunkins with excellent blue background colour.

Sherridan's not so common Common shows the red pigment Alex describes.

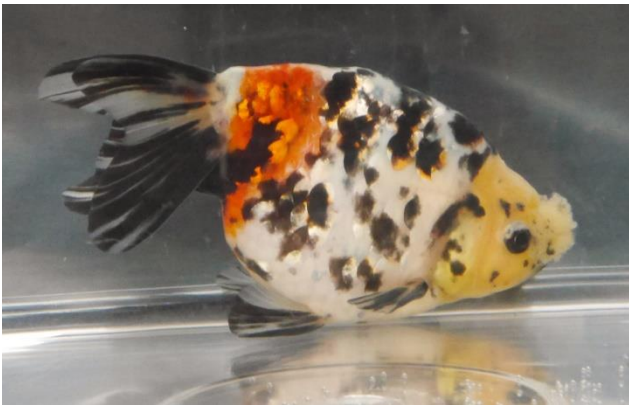




Colour spots can produce beauty, this lovely fish by President Bill shows it is the luck of the genes.



A good black colour is difficult to produce but has a beauty all of its own...as in this Craig's special.



Nacreous spots can migrate as the fish ages – this Pompon will change over the years...as Alex says 'it is all in the genes'.



Metallic scales give golden plates that look like jewellery...as in this winner by our (once) member Sharon's goldfish. There is (yet) no Nationwide Standard for 'spangled' fish, but in Japan, Alex reports, orange/white fish with spangles are called Calicos.



President Bill's Rambinos – a still taken from his DVD ('A Beautiful Underwater World' – do you own it?). Shows how selective breeding with albinos gave these pink-eyed golden fish, called Ramsden's Albinos – hence the name Rambinos.

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NEXT TIME Alex looks at finnage.....



## Fishkeeping 2016

I (VP David Ford) attended the AQUA 2015 Trade Show at Telford (October 14<sup>th</sup> & 15<sup>th</sup>) to see what products will be sold to us next year.



It is Europe's largest aquatic trade exhibition with 44 trade stands in two halls.

They hold a competition for the best eight new products to be launched next year, ranging from Reptiles to Pondfish, Aquaria to Merchandising.



Of interest to our pondkeepers was the 'Floating Fish Dome' by Velda BV. This is a plastic dome that floats above the pond surface, so you can see the fish as if in an aquarium...and they can see you (if they swim up into the dome).



This is the Winner's display showing the Dome.

The Dome's size can be seen on the Velda BV stand (a firm from the Netherlands that specialises in pond equipment)...



For our aquarium keepers, the new tanks for 2016 are all Nano-style with LED lighting and digital controls. The Winner was MiniReef 90 by Aqua One...







Many stands had unusual displays or offers to attract the visiting shopkeepers; the one I liked was this Goldfish aquarium...

You can read all about the Show in Practical Fishkeeping's January 2016 issue, or read my article in The Aquarium Gazette, issue 45 in December 2015.

## Minutes of the November Meeting

Good turn-out for a November meeting, even Alan Birchenough made it directly from the airport (he was in Turkey) with his luggage! We had a TV presentation of the new Bill Ramsden DVD version 'Beautiful underwater Worlds' – reduced to 30 minutes for potential internet publication. He still needs to add commentary though.

Sherridan reported on the latest Nationwide news. The Committee's next meeting should finalise the Standards publication and decide on the venue for the 2016 Nationwide Open Show. He also described our latest club social activities: the weekend in Llandudno, a meal at the Chaobaby in the Trafford Centre, plus visits to Dave's Aquarium in Bolton, Wigan Pier Aquatics and Manchester Pets & Aquariums. None had breeder quality Goldfish though, although some good fish was seen.

David Padfield read a letter from Brian Bates (who we decided should become a member of NGPS!) with its interesting comments on standards and judging. This led to much discussion and the evening ended later than usual.

It also ended with Sherridan (yet again) winning the room prize he donated.

**Meet again December 8<sup>th</sup> at 8pm at The Church Inn in Prestwich  
– see you there, then.**

