NORTHERN GOLDFISH & PONDKEEPERS SOCIETY

A Nationwide Society

NEWSLETTER

OCTOBER 2021

Bred this year, June Kemp's Bluejay Orandas (June is a member of NGPS but mainly with AMGK). These 'gold & silver' fish will develop the blue colour of their parents eventually.

The female

The male

AMGK

At last! This club will be holding their first live meeting since the Pandemic started. It will be on Sunday 17th October 2021 at their usual venue of St. Bartholomew's Church Hall, Brinklow Road, Binley,

Coventry CV3 2DT. It will be their AGM plus an auction between 1pm and 5pm. Perhaps the above Bluejays will be in that auction! Otherwise contact me for June's telephone or email details – she lives in Nottingham and the Bluejays should be available in a few months' time.

Top Tip

If you have an aquarium that did have Goldfish, but is now empty. You can scrub it clean, bleach the decorations, wash the sand and prepare it ready for new Goldfish. However, if you leave it for a day or two, mulm will slowly appear on the surface of the sand – despite all that washing. Providing you do not add Goldfish – who will stir up all the sand. You may then use a gravel cleaner or simple siphon to remove that mulm. Leave another day or two and more will

appear! It is all to do with relative particle size of the sand and mulm, but a useful way of a final clean-up.

One of my aquariums that was scrubbed clean, but mulm still appeared after a few days left empty. It took several siphonings to clear it (a power filter was running – perhaps water movement is needed too).

Pond News

Last month the Sun newspaper reported that at the back of a South Yorkshire home there is a Japanese Garden with a Koi Pond.

The website reported that the project started back in 1996 and showed it being built.

However, the news item was that the total cost to the owner was £40,000! Mind you that included a Japanese Tea House and floral displays. But that's pond devotion.

Goldfish News

The BBC TV show as many 'adverts' as ITV, but only about themselves. One currently in use is about their BBC Sounds

App – it shows a family, then a Goldfish, then the family with a Goldfish each, inferring that with that app, BBC Radio is part of the family, but individually.

But why in a Goldfish bowl?
Sends the wrong message !

Members Write

David Padfield was sorting old articles when he discovered this one – sent to me

for publication. Even though it is 40 years old, the information is just as relevant now. It was presented by Bristol University's Dr Peter Miller during a visit to a meeting of the Bristol Aquarists' Society back in 1981.

Goldfish Growth and Reproduction

The following notes were taken during the lecture by Dr Peter Miller and are reproduced as food for thought and a basis for further discussion amongst members of the society.

Growth is an increase in weight correlated with a corresponding increase in length.

Food is the supply of basic chemical materials into the fish where digestion takes place and up to 80 or 90% of the

food is absorbed into the blood stream as simple chemical substances.

Functions of the fish are expressed in four different uses of the chemical substances (food):

(1) Metabolism (2) Food storage (3) Reproduction (4) Growth

Metabolism is the primary priority to draw on the food supply and includes the burning up of energy used for the heartbeat, gill movement and swimming.

Food Storage is where the fish has the facility to put by energy, which is stored in the body as fat and can be drawn upon under adverse feeding conditions or more often during cold weather when feeding ceases altogether.

Reproduction – in Spring the fish uses food to form the reproductive gonads and

weight of the female fish may include as much as 25% of the total weight in the ovaries.

Some food materials are also used up in repairing the body tissues. The main areas of repair are the relining of the gut or intestine which takes place every few days, and also the replacement of the slime or mucous covering of the skin, which acts as a lubricant in swimming and as a protection against disease. As this protective covering is lost during normal activity, it is replaced.

Growth – it is only when the three priorities above have been satisfied that food is used for growth purposes.

There are two controls on the growth of the fish:

(1) Genetic (2) Environmental

Genetic control on growth: every particular species has a maximum size within which that species will grow due to its genetical makeup. Very small genetical differences in growth rates within this maximum will increase disproportionately due to the behavioural patterns and the establishment of a pecking order. In other words a very small genetical difference may cause some fish in a spawning to grow very slightly faster than others kept in the same tank under the same conditions. But very quickly these fish, which are only very slightly larger at the outset, will become dominant and take precedents in the 'pecking order' of that group of fish.

They will gain more of the food supply and dominate the other fishes so that what was at first only a small difference

in size becomes greater and greater and out of all proportion to the original genetical difference.

Genetical differences between fish of the same species can now be determined by an examination and comparison of the protein tissues of the respective fishes. However, for practical purposes it seems that we should continue with our selective breeding programmes and test matings.

It is the genetical makeup which determines which type of food is best suited for a particular species.

Environmental controls on growth.

A rise in temperature speeds everything up and increases growth rate but we need to be very careful in changing the environment – don't raise the

temperature too much, too quickly; the fish may die.

In general the faster grown fish will make smaller adults. Experimental work carried out by Dr Miller (but not with Goldfish) showed that the growth rate of young fish raised at a higher temperature levelled out to a maximum size which was much less than that attained by similar fish raised under cooler conditions, although the growing period of the latter was of course much longer. This suggested that the slower the fish is grown the larger it will eventually grow.

Slower growing fish use food more efficiently with a greater percentage of food producing growth, faster growing fish in higher temperatures are more active and use up more of their food in respiration and swimming, even though

they do rear faster up to the point where they stop growing.

The faster the fish grows the sooner it dies.

Other environmental factors for growth include the length of daylight hours, which keep fish active and feeding, and of course water quality. In addition to the more well-known water requirements there is a slightly better growth rate in slightly brackish water. The fish in freshwater has to pump out from its body under osmosis process whereas there is less pumping (and less energy used) in brackish water.

In the case of adult fish the formation of reproductive organs will have a prior claim on the food supply above growth – we should prevent our fish becoming

sexually mature. Fish kept in a short day length make better growth than those under a long day length because those 'in the dark' do not become sexually mature and therefore go on growing whilst the others are using their food to produce gonads, other factors being equal.

When reproductive activities are at their highest the growth rate will be at its lowest.

For our own practical purposes there are many considerations but it is reassuring to know that it is not absolutely necessary to rear our fish under tropical conditions in order to achieve satisfactory results.

Chairman's Comments

One of the perennial questions I ask myself and the subject of many disturbed

dreams (and I am extremely prone to really weird dreams, my most inexplicable was a few years ago when I dreamed I had, for some reason, to find David Nixon, the old TV magician's, brother. I tracked him down to a terraced house next to a railway bridge, knocked on the door and he wasn't in! This left me wondering so much I googled David Nixon and found he never had a brother - weird) is the question whether twin tail Goldfish varieties that appear as young fry to have joined tails are able to sometimes un-zip them and later present as split tails. There is a whole field of related questions; do they sometimes just hold their tails together when they are little, do small notches at the end indicate any potential etc. and the nightmare scenario - could split tails actually zip-up!

If we had time and space to properly study, record and grow on separately every individual fry we might find an answer to these questions, but of course we don't have any of those luxuries. I always sort any fish I am selling off again to check for tail splits and sometimes find one I think may have un-zipped but can never be sure.

As this year I have not bred anything I thought the winter was going to be kind to my dreams but then I got an e-mail from Stephen Whalley ….

Hi Sherridan,

Hope you are well. I am picking your brain again. Over this last week I have kept studying this year’s spawnings of my Lionheads and I am going to select my final Lions out of the 3 vats. Here is the

question: have you ever come across or heard of joined twin tails splitting after they are about six months if age? My concern about the Lions I have kept so far, was the lack of split tails. There seems to be more split tails now then there was when I last culled them, even ones which have now got a V started where their tails were joined. I would be very interested in your thoughts.

Many thanks, Stephen.

Can any members help with any information from breeding experiments they have tried regarding 'un-zipping' – email or TXT me.

(or anything about David Nixon's brother?)

Dave's Aquarium is open again, but Altrincham World of Water is closing

down and moving to Wilmslow Garden Centre. Have any members seen any decent metallic Fantails anywhere?

Back in November.

This NGPS Newsletter usually ends with the Nationwide Logo – there is also a Website Logo, here it is, for a change …..