

HOP SPOP

英國錦鯉愛好會東南俱樂

The E-Mag of the South East Section BKKS



Issue 38 November 2009



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Check out the latest BKKS
National info
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Oregon Koi & Watergarden Society.

The Nishikigoi Vereniging Nederland.

The South African Koi Keepers Society.

Partners in goodwill.

Koi Clubs participating in this exchange scheme are:-

- Nishikigoi Vereniging Nederland.
- Oregon Koi & Watergarden Soc.
- South African Koi Keepers Soc.
- NorCal Chapter ZNA (USA)
- Australian Koi Association AKA
- Mid Atlantic Koi Club
- Cambridge Koi Club
- ZNA Potomac Chapter
- Essex Section BKKS
- Texas Koi & Fancy Goldfish Soc.
- Cayman Island Koi Keepers
- Belgian Koi Society
- Banana Bar Koi Society.
- East Midlands Koi Club.
- North East Koi Club BKKS
- ZNA Guangdong Chapter.
- Southern Colorado Koi Club.
- KLAN (Germany)

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HOP SPOP

is the

on-line version of the South East Section BKKS' newsletter called "Spotlight", suitably sanitised and denuded of in-house content to make it interesting for other Koi Clubs. However, it will also contain some occasional South East publicity.

"Hot Spot" will be a periodic publication i.e. it will get published when we have enough articles to fill it's 8 pages.

Copies of it will reside on the South East's website and will be distributed to other Koi Clubs who indulge us with an exchange of magazines or newsletters.

Articles taken from "Spotlight" are the copyright of the South East Section but may be used by clubs who participate in this exchange.

The original text and photos can be obtained via the editors whose details can be found on the back page.

38 issues and still going!

FBAS Festival of Fishkeeping.

This show is one of the longest running general purpose fish shows in the UK. Organised by the Federation of British Aquarist Societies there are several species-specific fish shows within it's confines and one of those is a Koi Show.

But before I go into that it is worth highlighting some of the other aspects of this great weekend that comes at the end of the UK Koi Show season.

I've attended this show off and on for more than 20 years. More so in later years due to its koi content and during that time I have witnessed many changes. During the nineties and until recently this show was generally sponsored and supported by many of the equipment manufacturers that rely on the hobbyist for their livelihood. Along with sponsorship etc, these companies would generally have a stall or two at the show that added to the overall atmosphere in what I'd always considered to be in a positive way. Sadly, with the exception of Tetra they seemed to have deserted the FBAS this year but thanks to the efforts of the hobbyist societies that drive this show there were barely missed. The show was still the same size but the gaps that must have been made by the lack of manufactures were more than adequately filled by the various hobbyist societies themselves providing advice and sometimes fish for sale. Amongst them was a particular favourite this year — UKAPS a planted aquarium society that gave demonstrations throughout the show.

Any Koikeeper visiting this show would soon spot that we are not an isolated breed of fish fanatics. The world of guppies, betas, discus, catfish and goldfish have their aficionados too that are no less dedicated than we are. Chief amongst them is a man called Joe Nethersall the Chairman of the FBAS who's been at the helm of this show for as long as I can remember. Like any good Chairman he's surrounded and supported by a large team of show workers that I've come to recognise over the years but can't name. It was Joe that was fundamental in getting koi involved in this show.

Running the Koi contribution to this show was Glenys Cambridge - the Show Chairman of the South Hants Section who's motley collection of show workers from 4 koi clubs staged yet another successful event within this year's Festival of Fishkeeping.



Overall Grand Champion - Carl Davison - Sanke.

MSB GC - Carl Davision - Showa

South East GC - Des & Gregg Harris - Sanke

South Hants GC - Trevor Childs - Showa

Worthing GC - Mick Murray - Sanke

Baby Champion - Frank Chalke - Kohaku

KLAN Friendship - Trevor Childs - Kumonryu

NVN Friendship - Des & Gregg Harris - Kin Matsuba.

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This event is unusual in that it has five Grand Champions. One overall Champ and then one for each participating koi club. Add to those a Jumbo and a Baby Champion and then the rest of the awards are just the standard round one awards.

Each club is permitted 5 vats each and there is a limit on the number of koi that an exhibitor can show. As this puts a finite limit on the number of koi that can be displayed a reduced number of Show Classes are used (8) to keep some level of competition. This year there were 6 size categories and a total of 110 fish.

Although this Koi Show is more about publicizing the hobby and having a bit of interclub fun, the standard of exhibits can be high giving the trainee judges an good training platform, especially where the reduced number of show classes throws together varieties that aren't usually judged together.

This year's judges were from the NVN who have now judged this show three year's running and appreciate it's uniqueness as an asset to their judges training programme.

because it was the Baby Champion at the South East show. In the interim period it has grown a little and is now in size 2 (Just!).





Show Classes: Kohaku, Sanke, Showa, Utsurimono, Tancho, Kinginrin, Metallic and Non-metallic.



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2nd Shanghai Chapter International Koi Show & 4th Shanghai Ornamental Fish & Fishing Exhibtion.



It appears that the Hayling Island Festival of Fishkeeping in not so unique. This photo report from Hongman Leung shows that combined shows with other fish keeping groups is just as prevalent in China.

Amongst the judges are Nobuo Ozawa who recently officiated at the NVN Show in Arcen, Sadayuki Suzuki who judged at the Belgian Koi Show in 2009 and

Alan Nementzik who has previously contributed photographs to Hotspot. But pride of place goes to Hongman and Maize Leung who sported their South East Show shirts.

More photos of the winning koi can be found via Hongmans photo library -



 $Http://picassaweb.google.com.tw/hongman 333/2nds \\ hanghaikoishow$

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幼魚總合冠 及30部總合冠-紅白-光明錦鯉場 Baby Champion & 30cm 1st Runner

鯉俱樂部

Dregspace!



Pictures speak a thousand words so there should be no language problems we checking out this site - http://dregspace.spaces.live.com

Jeroen Dregmans, accompanied by Joop van Tol are currently in Japan and recording their escapades as they go. Koi Show, Breeders facilities as well as some excellent shots of the Japanese countryside are to be found alongside a few irrever-

ent shots as well as some great fish photos





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The potential size that koi might get to is a common topic of conversation amongst koi keepers. This isn't surprising given the enormous size that some specimens attain – the current world angling record for Cyprinus carpio is around the 85lb (38kg) mark! Although koi tend to be a little less stocky than carp varieties bred for angling, they are still capable of reaching impressive weights. This article takes a look at growth in koi and what influences the final size of our fish.

Growth in koi

In humans and many other animals, growth is 'determinate'. In other words, we grow to a particular size and then stop. Fish are a little different – they grow indeterminately, meaning that they never really stop growing. Large fish do grow more slowly though, and in some cases it may be hardly noticeable. This is because larger fish require more and more resources as they get bigger. For example, larger fish require more oxygen in absolute terms, yet as fish grow the surface area of their gills relative to their body mass decreases. This limits the amount of oxygen available for liberating the energy in food, and consequently restricts growth.

The speed at which koi grow, and their eventual size, depends on a number of different factors (see below). The optimum temperature range for Cyprinus carpio is $20-30^{\circ}$ C, and in tropical and sub-tropical climates year-round growth is possible. Growth rates may amount to several kilos per year, whereas in more temperate areas it can take a good 3-4 years to attain more than a couple of kgs. Only koi keepers with heated ponds are likely to see faster growth in their fish.

Feeding and growth

The process of growth involves the construction of new body mass, e.g. muscle and skeletal tissue. This tissue is built from the nutrients that koi receive in their diet, such as amino acids (protein) and minerals. For growth to occur koi need sufficient nutrients and energy to meet their basic metabolic requirements, with some spare for building new tissues. Growth rates therefore depend greatly on how the energy they consume is diverted to different functions, and can be explained by a simplified energy budget:

$$G = C - (F + U + R)$$

Of the energy that koi consume (C), some is lost as undigested faecal matter (F), some is lost as dissolved wastes (principally nitrogen) in excretions from the gills and in the urine (U), and some of it is used for general metabolism and maintenance (R). What's left over is retained by the fish as growth (G).

The amount of energy available for growth is influenced by the quantity and quality of food fed. For example, foods containing highly digestible ingredients will produce less faecal matter, and therefore values for F will be lower. Nutrient levels and manufacturing processes can also affect F.

Values for U are affected by how efficiently absorbed nutrients are used. For example, protein is broken down into its constituent amino acids during digestion, and these are absorbed by the fish. They are then either used for building new tissues or they are eventually broken down to provide a source of energy (resulting in ammonia production). By supplying alternative energy sources (carbohydrates and oils), more protein is spared for tissue synthesis, leading to less ammonia production and therefore a lower value for U.

The general metabolism of the fish (R) depends on a number of factors, in particular temperature. As the temperature increases, so does the metabolic rate. Unless additional food is available, a greater percentage of consumed energy will be diverted to meeting increased metabolic demands. Growth will therefore suffer.

Food therefore plays a hugely important role in fulfilling your koi's capacity to grow, and to achieve the best growth rates food quality must not be compromised.

Factors affecting growth rates

There are a multitude of factors that affect growth rates, and the following are just an example of some of the most important:

Temperature

Q10 theory says that for every 10°C increase in temperature, the rate of chemical reactions (metabolism) will roughly double. This is important for koi because they are ectothermic ('cold-blooded'), and therefore their metabolism

Rupert Bridges

increases as the temperature rises. A higher metabolic rate means they require more energy and nutrients to maintain themselves in good condition, and in addition they have a greater capacity to build new body mass. This is why koi feed more and consequently grow more in the summer.

This holds true up to a point – above a certain temperature feeding rates slow down again, probably due to oxygen limitation. However, it is well known that we generally need to feed more to our koi in the summer months. In addition it is important to use a proper growth food if you want to maximise growth rates. Ordinary foods are lower in protein and energy and therefore do not deliver the same amount of nutrition per gram. Whilst you could just feed a lot more of these, growth foods can be fed in smaller, more practical quantities and therefore produce less waste (assuming they are well formulated).

Because temperature is so critical for growth, koi keepers who are looking for really big, fast-growing fish might consider heating their ponds through the winter to allow year-round feeding.

Oxygen

Oxygen is required to release the energy contained in food, and is therefore essential for good growth. This is especially true at higher temperatures, when oxygen levels in water are lower yet capacity to grow is at its highest. Basically, if you want your fish to grow well then ensure the pond is well aerated. Oxygen levels should ideally be above 6mg/l year-round.

Stress

If koi are stressed they respond by mobilising energy reserves in readiness to escape the danger. If stress is chronic (e.g. poor water quality), this leads to a long-term increase in demand for oxygen, nutrients and energy. Naturally this leaves less for growth. This is probably partly responsible for the old wives tale that fish only grow to the size of the pond. Large fish in small ponds are likely to be more stressed, and therefore less likely to grow as rapidly.

This is of course unacceptable, as stress also leads to health problems. To give your fish the best chance of growing rapidly, stress must be kept to a minimum.

Genetics

Nature vs nurture is a key consideration when it comes to growth rates. As we've seen, the environment and feeding regime that koi receive is central to their growth rate and eventual size. However, there is also an underlying genetic factor that plays a part. It's well known in aquaculture that certain genetic strains of fish are more efficient at converting food into body mass, and recent advances in genetic engineering have demonstrated that growth rates can be massively accelerated if desired.

For example, experiments with transgenic common carp have shown that they divert more energy to 'G', and less to 'U' & 'R'.

The principal is true for koi also – some individuals or varieties will display differences in growth rates that cannot be explained by environment alone. This may be due to more efficient synthesis of body mass, or it could be that the 'character' of the fish means it is always first to feed and gets more than the others. Either way, there is little that we can do to influence the genetic component of growth.

Because of the complex interaction of environmental and genetic variables, we can never be certain how big our fish will get, or how quickly they will get there. However, if you're looking for big fish, by providing the right environment and a good quality diet you will give them the best chance to grow.

References:

Food Intake in Fish, Houlihan, Boujard, Jobling (2001)

Carp, Biology and Culture, Billard, R (1995) Developments in transgenic fish in the People's Republic of China, Fu, Hu, Wang, Zhu (2005)

www.koiexcellence.co.uk



SHOW DATES FOR 2010?

Be sure to send us your show dates for next year.

If you have a poster send it in jpeg form and we'll endeavourer to run it for three months providing space permits.

We'll be featuring a list of show dates from the January issue which will also be published on the South East's website.



Main sponsors of the 2009 South East International



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Shimmies are small black spots that interfere with the pattern of fish-especially kohaku (but also present on sanke and other forms).

So 'black spots' can be phantom markings of a pattern or they can be atavistic 'memories' of wild genes being expressed in an otherwise refined line bred mutation.

Put another way, shimmies can be 'normal' or abnormal'. In either case however, they are demerits in the show ring.

The most common type of shimmie in tateshita is the wild gene expression shimmie. This is a cluster of deep sumi colored cells trapped in the upper dermis or even epidermis and is often associated with stress conditions or the simple reality of living in a closed end pond with high levels of nitrate. In this case it is a natural expression of normal wild genes. The second shimmie type which is found in rather good gene pools is the LINKED MUTATION expression of sumi in an otherwise white based fish with kohaku lineage (but with sanke in the blood). I brought this observation to NI a long time ago now, but for new readers- kohaku is a fish with a mutation of red instead of black and also a mutation of the white spreading gene in the base coat. This genetic battle isolates the red (a subsitute for black) into pattern mutations called piebald gene expression. We wind up with a white fish with red gene expression in dorsally located templetes left by the piebald gene for pattern. A true kohaku is a fish with a black 'dolllike' eye.

The sanke, on the other hand, is a fish with incomplete dominance when it comes to black. And in it's mutation for pattern, it carries BOTH the piebald gene pattern and a remnance of sumi base in isolated areas.

The sankes eye is perhaps the most amazing of all koi eyes! It is not a black doll like eye but rather an ornate eye! It has a easily seen blue eye brow and in

James P Reilly

the pupil we see a 'fern like' silver structure that makes the eye quite beautiful and unique in the koi world.

But breeders have been pulling good kohaku from sanke spawns for decades. And high end breeders have been agressively crossing the two varieties for decades more for introduction of desirable traits. As a result, the offspring of most kohaku types have blue eyebrows now. And as a result, can and will often throw a sumi spot or two as an expression of their sanke lineage. No amount of lemon juice or drilling will change that fact.

Taken from a post on

Nishikigoi International forum.

BKKS NATIONAL change of venue.

The British Koi Keepers Society is proud to announce that their 2010 National Koi Show will be held at **Bingley Hall, Stafford Showground, Weston Road, Stafford, ST18 0BD** on the

26th and 27th of June.

The BKKS will be celebrating its 40th birthday in 2010 and this show will be the '35th National'.

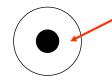
More details about the show can be found on

www.bkks.co.uk

Details of the new show ground can be found here -

www.staffscountyshowground.co.uk





White or Grey colour

Sanke



Blue Ridge "Mekazura" pattern Dark Grey or Blue Silver



Research & photo – James P Reilly Graphic – Bernie Woollands.

Partners in goodwill.

This sentiment and it's logo were the product of Norman Call's (our representative in the Oregon Koi & Watergarden Society) imagination. It came about in an organic sort of way that has a lot to do with the relationship between our two clubs, our two countries and our hobby.

Our Spotlight newsletter had USA/UK logo that was getting a bit faded & jaded after years of photocopying etc. Knowing that Norm was a graphic designer I asked him to give it a makeover which he did. It has adorned our newsletter ever since. It was delivered in October 2001 at a time when the atrocities and the aftermath of 9/11 were still current news and fresh in peoples minds.

That month, we were invited to attend a fund raising 'Barn Dance' by the governors of the school where we hold our Koi shows. The school was at one time in its history (WWII) a training school for fire-fighters of the London Fire Brigade who still support the school, as we do now. I forget the details now, but the heroics of the New York City Fire Department were mentioned in relation to the dance.

As a gesture of support Teresa Lambert one of our members printed off Norm's logo, laminated them and produced brooches which we wore to the dance. I sent one to Norm, who is an avid pin collector, who in turn turned the concept into a pin. The logo next appeared on the OKWS' own newsletter "The Tall Fish Story" underlined with the sentiment - "Partners in goodwill" an ethic we have since adopted and spread. Our partners are now the OKWS, The NVN (Dutch Koi Society and the KwaZulu Natal chapter of the South African Koi Society SAKKS.

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www.niigata-nishikigoi.com

About the South East Section.

The South East Section was founded in 1981 by a break away group from the London Section. It obtained Section status from the BKKS in 1982 and serves the counties of Kent, East Sussex, Surrey and Berkshire and the southern boroughs of London.

It's neighbouring Sections are the South Kent to the south, Essex to the North, Worthing to the west and the MSB (Middlesex & Surrey Borders) to the northwest.

The South East has a pretty stable membership generally numbering about 85 families.

Almost since it's founding the SouthEast has participated in information exchange with overseas Koi clubs and continues to do so today.

Our 'Open' show is both an attraction to the UK Koi scene as well as Koi keepers Every year the show attracts an increasing number of overseas visitors and through them a number of useful connections have been made which enhances our appreciation and understanding of the hobby.



The show is always held on the August Public Holiday which generally falls on the last weekend of that month. Details can always be found on our web-site -

www.koi-clubs.com/SouthEast

The South East meets on every 4th Sunday of the month with the exception of December. Our meetings start at 2pm and we endeavour to have a speaker for 2 out of every 3 meetings. Those speakers generally cover Koi related subjects but occasionally we have one that diversifies a little e.g. Bonsai.

Our current membership fees are £15 per family and details as well as a schedule of speakers can be found on our web-site.

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