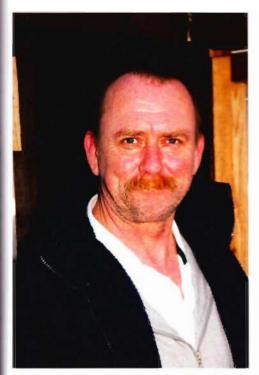


80 centimeters may not seem like a big deal to some people, particularly those in Asian countries like Japan, Singapore, Taiwan, etc. But, in England, we are somewhat challenged by our climate, and also by water that in most areas, isn't favourable towards Koi growth and condition.

The intention of this article is to demonstrate that it is possible to grow a small gosanke Tosai, to become Jumbo Koi in excess of 80cm. To make things a little more interesting, and to avoid it taking a lifetime, the 'winning' kohaku, sanke, or showa, will hopefully obtain this size before it's fourth birthday, but with an age limit of 5 years old. Updates will appear right here in 'Koi-Bito' in every issue until this goal is achieved. A four year old Koi of 80cm is the aim here, but even I can't be certain that it is possible. But, I am confident that it can be achieved at five years old. With this in mind, I have set annual growth targets, and in the event of none of the featured Koi hitting a target, I will personally give one of my Koi (featured here) from Colin's pond to the BKKS, for them to auction at the National Show of that respective year, with all proceeds being donated to the society. So, the minimum size for each year are as follows...

BKKS National 2004 (June), 60 cm (nisai) BKKS National 2005 (June), 68 cm (sansai) BKKS National 2006 (June), 75 cm (yonsai) BKKS National 2007 (June), 80 cm (gosai) Although it would be nice for one of these Koi to win the BKKS National Show, this is not the intention <gri>

My original intention with this article was to feature a cross section of ponds, and also ponds with hard water. But, I felt that this would be a little harsh on the owners of these ponds if the Koi didn't grow, and would make this article even longer and boring to read All three ponds have Bakki Showers fitted, and this is because I believe that these ponds have a very good effect on the condition of the Koi, as it is very hard to keep big Koi in good condition. Many Jumbo Koi are ruined by bad water. So, I am now featuring three ponds that I feel are capable of achieving the goal Just to make things fair, none of the Tosai featured are expensive. Most of the Koi varied in price from £90 to £250, with the most expensive one being £600. Although price of the Koi isn't important, it will kick things into perspective as the Koi grow, and improve. The result of the 'bigger picture' of this article may convince some people that if no expense is spared with keeping Koi, then the results with the Koi can actually make the hobby seem extremely good value for money, rather than simply a costly one. Lets face it, if you realized it were feasible that you could grow a £300 Tosai, to become a Jumbo Koi worth perhaps £10,000+, wouldn't you try achieve it? Furthermore. can you imagine the satisfaction gained from such an achievement?







Challenging to grow the first 80 cm koi in the UK - Left: Colin Hughes of Wales Center: Bristol's own Ian Graham Right: BKKS Grand Champion owner Cliff Neale of Reading

Pond 1 is in Wales, and belongs to Colin Hughes. The pond contains 7500 gallons, and is situated in an area where the mains water is very soft, with KH and GH readings of 2 dh, and TDS of about 50 ppm. Colin maintains a TDS in his pond of between 70 and 80 ppm, and a KH of about 1.5 dh. At the time of writing, the pond is home to about 50 Koi, with most of them having lived here since Tosai, and most now being Nisai, and Sansai of between 50 and 60cm. Colin has already succeeded in growing a male kohaku from Sansai of 50 cm, to 74 cm in two and a half years. The pond is now overstocked, and is entirely my fault! This is because, in the past, a number of Tosai that haven't sold, have been sent there because of my reluctance to sell them cheaply, or if you like, 'cutting my losses'. Some of these Koi will feature in this article. Typical pond water test readings for Colin's pond, are as follows... Ammonia 0.01, Nitrite, 0.02, Nitrate 0 (using color match test kit), and pH 7.1. Colin feeds a mixture of Medicarp and Nobori, and also gives them treats of cockles, and bread & honey.

Pond 2 is one of 6500 gallons, belonging to Ian Graham, in Bristol. Bristol water is very hard, with mains water being generally of about 300 ppm (TDS), and having a KH of about 8dh... This is lousy water, in which, it is nigh on impossible to grow Koi, and is also prone to making Koi develop shimmies. Hence, Ian runs a Reverse Osmosis plant on his mains water, and then mixes a small proportion of 'raw' water back in, hence making a blend of good soft water, which I prefer to call, "Home made Welsh water"! Ian runs

his pond at a TDS of about 80 ppm. This water has a KH level of about 1.5 dh. Ian's test parameters are typically: ammonia 0.01, nitrite 0.03, nitrate 7.8 mg/l, and a pH of 7 to 7.1. Ian feeds a mixture of Momotaro food, and Daisuki Gold, with cockles being fed as an occasional treat.

Pond 3 belongs to the 'BKKS 2003 Grand Champion' owner, Cliff Neale. In fact, in Cliff's case, two ponds will be responsible for this challenge. The main pond is some 18,000 gallons, and the second pond is an 8000 gallon pond that uses the 'Onishi Streamflow' principle, which has a very high circulation speed, consequently making the Koi more active, and hungrier. This Streamflow pond is likely to give exceptional results. The water in Cliff's area is also very hard, so he uses the same RO (reverse osmosis) plant as Ian and myself, for making 'Welsh water'... great for growing Koi! Prior to running his RO plant, Cliff never had any significant growth in his 18,000 gallon pond. This has all changed this year, and even the 'Grand Champion sanke': "Hebetoo", has grown 2 cm in the last six months. Other Koi, that have never shown any significant growth, have now started growing greatly this past year since using RO water, and the Bakki Showers. Cliff's test results are typically, ammonia 0.0, nitrite 0.03, and a nitrate level of 12 to 16 mg/l, which is still very low. Cliff feeds Momotaro Koi food.

All of the above ponds are covered and heated all year round. There is much debate as to whether this is good for Koi, but in this instance, it's the best way

to go. The Koi will still have a sexual cycle, as the temperatures in all of these ponds are dropped a little during the Winter months.

To keep things fair, all of the Koi in each of the ponds, are from the same breeders, age, and bloodline. The Koi are all from Momotaro, and Takeda, as both breeders place great importance on bloodlines, and genetics. There is no point in trying grow a Koi to 80cm, that can isn't genetically capable. There is also no point in trying to grow Koi of inferior bloodline, as it is quite common for such Koi to lose their color and quality, if grown quickly. I would, however, urge you not to give up on your existing Koi, and to rush out and buy ones from the breeders featured here. It is wiser to keep them, and grow them alongside your new additions, to determine for yourself which breeders Koi you desire in the future. This is the best way to learn.

Colin's Koi

Just for fun! In Colin's case, I am featuring a few previous Koi that were Tosai born in May 2001. This is simply because with any luck, one of them will become over 80cm within the next two years, which will keep readers interested until one of the 'competing' Koi reach 80cm in the following year. Colin only buys Koi as Tosai.

Koi 'A' is a Momotaro kohaku, born from 'Eagle', in 2001. This Koi arrived in December 2002, and was purchased in Spring 2002. In the Summer of 2002, the Koi succumbed to 'wasting disease', which it suffered

from for about three months before recovering. This greatly hindered it's growth. However, here are the sizes of this Koi so far...

Spring 2002, 21 cm February 2003, 41.5 cm April 2003, 47 cm October 2003, 55 cm December 2003, 59 cm

Koi 'B' is a Momotaro kohaku that is an offspring from 'Sakurahime', the 92 cm kohaku that won the 2001 "ZNA All Japan Show". This kohaku arrived in December 2001.

February 2002, 33 cm April 2003, 47 cm December 2003, 63 cm

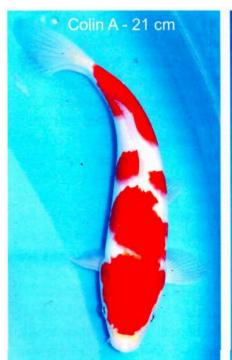
This kohaku has a high likelihood of exceeding 80cm.

Koi 'C' is another 'Eagle' kohaku, and measured 21 cm in December 2001. Come December 2002. nobody wanted this Koi, so I sent it to Colin's pond.

December 2002, 30 cm April 2003, 41 cm October 2003, 58 cm December 2003, 62 cm

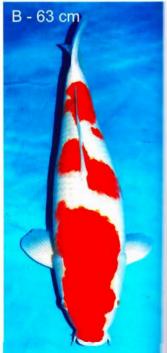
This Koi has a high likelihood of exceeding 80cm

Koi 'D' is a Momotaro sanke. I don't know the











parent, and have only included this Koi as a point of interest. The Koi arrived in December 2001. During the Summer of 2002, the Sumi became a little messy. In December 2002, it measured 30 cm. The Koi was messy to look at, and the Hi and skin didn't look very good. But, I have a hunch about this Koi, which is why I sent it to Colin's pond. This Summer, the Hi has improved no end, as has the skin. The Koi has also grown greatly. Although the Koi is still very much a mess, I am very confident that it will become a very big, and impressive mess! If this Koi grows to 80cm, it will look far more pleasing to the eye, because of the quality it will hopefully posses.

April 2003, 40 cm October 2003, 59 cm December 2003, 62 cm

All of the above Koi are being featured in order to keep you entertained as the younger ones catch up, so we will now move on to Colin's Koi that are competing against Cliff's, and Ian's in the '80cm challenge', as these are the important ones to watch!

The first Koi ('Colin 1') is a Momotaro kohaku. The parent of this Koi is a Sister of Mr Kaneko's "Seio", the 92 cm 5 year old that very nearly won the 2003 'All Japan Show'. At the time of breeding, this parent Koi was 4 years old, and 75 cm. So, this kohaku was born in June 2002, and measured 35 cm in May 2003. In December, she measured 51 cm. This is a prime contender for 80 cm.

The second Koi ('Colin 2') is a sibling of the above, and measured 30 cm in May 2003, and 44 cm in December 2003. I don't think that the Koi will as big

as the former, or as fast growing, but the Koi is very good.

The third kohaku ('Colin 3') is another sibling of the above, and arrived in May 2003, at 29 cm. This Koi measured 45 cm in December 2003, and is in my eyes, likely to get very big, and with wonderful quality.

The fourth kohaku ('Colin 4') is yet another sibling of the above, but arrived in December 2002 at just 5 months of age, at 15 cm. She now measures 47 (Dec.. '03), and will be an interesting Koi to watch. When measured, I mentioned to Colin that the color was actually very good, but that I was concerned about the Kiwa, as I thought that the Koi might lose it's color in the future. It is hard to see in this pic, but the Maruzome Kiwa is slightly exaggerated, which makes me think that some of the scales at the back of each step of pattern will break away as isolated 'dots' of Hi at the back of each step... not good! In the next issue, I will take pictures of what has happened in this respect, just in case readers wish to be aware of this when buying Koi for their collections. After photographing this Koi, and returning home, I realized that this kohaku has lost it's Kuchibeni. Even Koi from the best of bloodlines can sometimes lose Hi.

The fifth Koi ('Colin 5') is a showa from Takeda Koi Farm. This Koi arrived in December 2002, and measured 20 cm. In Spring 2003, the Koi wasn't sold, so I sent it to Colin's pond. She now measures 51 cm (December 2003). I feel this Koi to be a good contender for the challenge, and will also become very beautiful as a big Koi. Sumi quality will be first class, and will hopefully cover the weak part of Hi





behind the head.

Koi number 6 ('Colin 6') is also a Takeda showa, which also measured 20 cm in December 2002, and was also sent to Colin's after lack of interest. This Koi is now 49 cm. The Koi isn't as good quality as the former one, but I am confident that the quality will greatly improve. I feel that it is unlikely to achieve as big a size as the 51 cm one. These showas were the cheapest of all the Koi in this article.

Koi number 7 ('Colin 7') is a Momotaro showa, which measured 15 cm in December 2002. This Koi measured 48 cm in December 2003, and is yet another 'unsold' Koi that was sent to Colin's. Please note that all of the 'unsold' Koi were sent to Colin's to be grown big as a learning exercise, and not to be brought back again.

The eighth Koi ('Colin 8') in Colin's pond is a Momotaro sanke which arrived in May 2003 at about 20 cm. This was a Koi that was bred in August 2002, hence it's small size. The Koi measured 41 cm in December 2003, but I only sent it to Colin's pond in November 2003 (circa 30 cm), on the day before my new stocks arrived. This Koi is a good point of interest, as it's color quality is pretty good, but the Kiwa is somewhat messy. The pattern on the face also has a blurred edge now, so it seems to be developing

a little more Hi, which I greatly disfavor. So, lets see what happens here. I don't think that this Koi will get particularly big, but I am sure that readers will enjoy watching what happens as it grows.

The ninth Koi ('Colin 9') in Colin' pond is an Omosako Shiro Utsuri. This is a Tosai that arrived in December 2002 at approximately 13 cm. I grew this pond in my own pond up to about 37 cm in mid-November 2003, and sent it to Colin's to see what he could make it become. It also serves as a valuable comparison of growth, as Shiro Utsuri don't generally grow as fast, or as big, as gosanke. So, it will be interesting to watch this grow.

Ian Graham's Koi

Ian is the proud owner of three sanke that reside in Momotaro's 1500 ton pond, and is aiming to grow the Koi that reside in his own pond at a rate that Momotaro wouldn't be ashamed of. Since installing an RO plant, and changing to Bakki Showered filtration, 2003 has become a year of very significant growth, and as a result, Ian only buys Tosai as he has become very inspired by the results he has had in this past Summer. None of the following Koi belong to me... they are all Ian's.

Koi number 1 ('Ian 1') is a Momotaro kohaku from 'Eagle'. The Koi was born in June 2002, and arrived in December 2002 at a size of 23 cm. In Spring 2003 she measured 33 cm at the time of purchase. As of December 2003, she measured 54 cm. This Koi recently damaged the scales just behind the head, but will hopefully recover from this soon. This is a very good Koi, that has Hi development that is typical for an Eagle Koi of this age. Time should see this Hi become very thick across the scales, and having a deep orange/red coloration.

The second Koi ('Ian 2') is also a kohaku, and came from the same 75cm 4 year old parent as the Koi in Colin's pond. This kohaku arrived in Spring 2003, and measured 33 cm on July 11th, at the time of purchase. Size in December was 49 cm. This Koi is a reasonably good contender for the 80cm goal, and the only let down, is the area of weak sashi of the third step of it's pattern. With a little luck, this will improve as the white skin thickens with age.

The third Koi ('Ian 3') is a kohaku from the same parents as the previous one, and measured 35 cm on July 11th 2003. She measured 49 cm in December 2003. I feel that this Koi will grow very big.

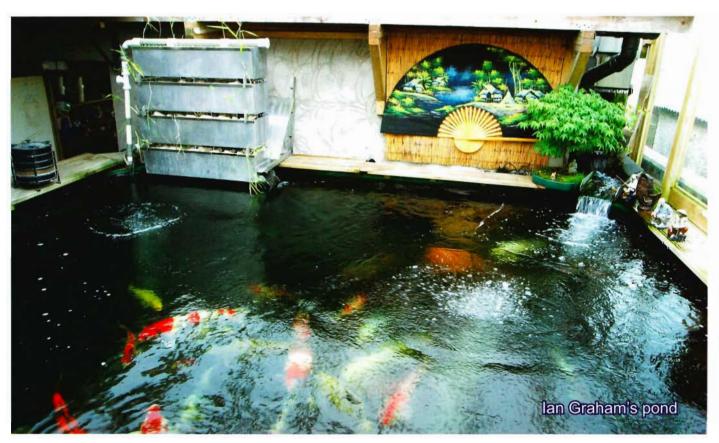
Koi number 4 ('Ian 4') is another kohaku of the same parent set as above, measuring 31 cm in June 2003. She measured 48 cm in December 2003, and I am confident that she will grow to a big size.

The fifth Koi ('Ian 5') is a Momotaro showa, which arrived in December 2002, at a size of 18 cm. This Koi was 26 cm at the time of purchase in Spring 2003. Size in December 2003 was 48 cm. This Koi has exceptional Sumi, and this koi's only let down is the area of Hi shining through the scales up on the shoulder. Fortunately, being a showa, this is a lot easier to overlook, as it would be unforgivable if the Koi were a kohaku. Thank goodness for the Sumi!

Koi number 6 ('Ian 6') is a Momotaro sanke that arrived in Spring 2003 at a size of 21 cm. This Koi is a sibling of the one that Cliff has. Size in December. was 41 cm. This Koi was born in August 2002.

Koi number 7 ('Ian 7') is an interesting Momotaro sanke. This Koi was for sale at the 2003 BKKS National Koi Show, and returned unsold measuring about 23 cm, at which point, Ian bought it on Daisuke Maeda's advice. I am not sure of the sex of this Koi. but am reasonably confident of it's quality. The only cause for concern is the development of secondary Hi just before the tail joint. Secondary Hi seldom becomes attractive, and can often be an indication that more will develop elsewhere. So, we'll watch this Koi. This Koi measured a little over 45 cm in December of 2003.

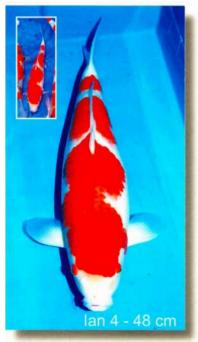
The eighth Koi ('Ian 8') is a Takeda sanke. This is the only Koi of Ian's that I thought was probably













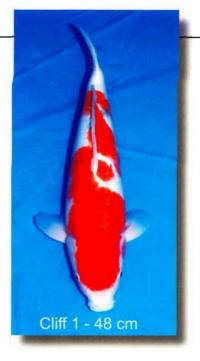














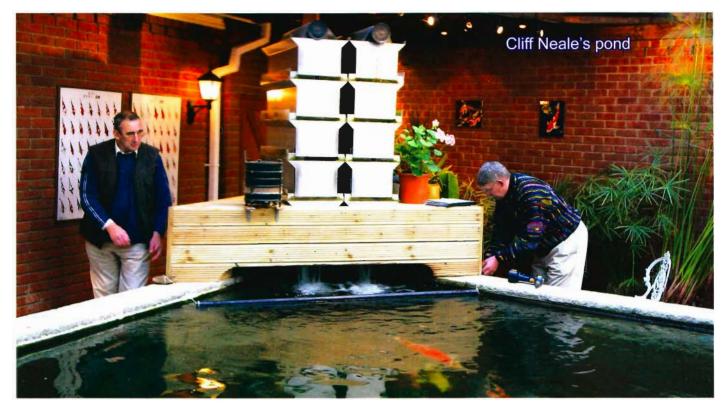












male when it was small. But, like most of the others, it turned out female. Size in December 2002, was about 22 cm. In December 2003, she measured 50 cm. This is an interesting Koi, of excellent quality. Unfortunately, although the Sumi looks good, it all falls on top of the Hi plate, so it is impossible to determine if the quality of the Sumi is good until some develops somewhere on the white skin. Sumi like this also lacks appeal, and hence, value. Fingers crossed!

For reasons of growth comparisons, we are including an Omosako Shiro Utsuri ('Ian 9'). I don't think this will achieve anything like the same growth rate as the other Koi, but nonetheless, it will be interesting to see how the growth compares to the gosanke Koi. The Koi arrived in December 2002 at about 13 cm, and measured 39 cm in December 2003.

Cliff Neale's Koi

The first of Cliff's Koi ('Cliff 1') is a Momotaro sanke, born August 2002. This Koi arrived at 21.5 cm in May 2003, and was shown at the BKKS National Show, at 22 cm. The Koi measured 48 cm in December '03. The parents are unknown, as the Koi was the result of a number of late spawnings that yielded small numbers off offspring, and were hence all mixed together when put into the fry ponds. The Hi plate has become very pale on this Koi. But, this is because of the very fast growth. It is very unlikely that the Hi will break up, and should look much better

as the Koi gets older. This Koi will shine when it is big.

The second of Cliff's Koi ('Cliff 2') is the kohaku that won 'Baby Champion' at the 2003 "BKKS National Show" at the end of June. When she won, she measured 33 cm, and now measures 48 cm as of December 2003. Unfortunately, this will never be an outstanding big Koi, as the head is somewhat inferior, but I felt compelled to include it because it is a koi that many people will recognize. This Koi, and the following ones, are from the same 75cm (4 year old) female parent as Colin, and Ian's Koi.

Cliff's third Koi ('Cliff 3') is a Momotaro kohaku that was exhibited alongside the "Baby Champion", and also measured 33 cm. It measured 48 cm in December 2003.

The final kohaku ('Cliff 4') of Cliff's measured 33 cm in May 2003, and measured 49 cm in December 2003, and is a sibling of the two above. This is my favorite of Cliff's kohaku.

This concludes the Koi that will be featured in this issue. There are a handful of other Koi that could have been added, and in the event of any 'mishaps' with the featured ones, we bring a 'substitute' into a future issue, but this is highly unlikely. I hope that you have enjoyed this article, and that watching the progress of these Koi will inspire you to get the maximum from this wonderful hobby. If you feel the need for any additional information for the next issue, please visit the Koi-Bito Magazine message board. 鯉人