

Show Standards are not necessarily detrimental to animal welfare - The case for Koi Carp.

On the 19th August 2008 the BBC broadcast a programme entitled “**Pedigree Dogs Exposed**” claiming that -

“**Dogs are suffering acute problems because looks are emphasised over health when breeding dogs for shows**”.

This programme highlighted some unsavoury aspects caused by breeding animals to show standards, citing deformities and genetic weakness as the unacceptable by-products of the practice. Naturally this has brought attention to all aspects of domestic animal shows, including fish and therefore Koi.

This paper is aimed at addressing any concerns regarding Koi, Koi Shows and the influence of Koi Show Standards. We aim to prove that where the Koi keeping hobby is concerned; Show Standards have had a positive impact on breeding.

About us:

We are The South East Koi Club, located in Kent that has been organising Koi shows since 1982. Starting with small in-house shows, then progressing to joint shows with other Koi clubs and culminating in a series of large Open Shows which attract exhibitors from all over the country and visitors from abroad; 2008 was our 22nd such show. In 2007 we disengaged ourselves from the Show Rules of the British Koi Keepers Society (BKKS) and aligned ourselves with the international Koi community, mainly the Netherlands, South Africa and Japan, and introduced our own rules. Our Show Standards, that of the BKKS and the international Koi community were all originally based on those of Zen Nippon Airinkai (ZNA) - the hobbyist society of Japan.

A very brief introduction to the origins of Nishikigoi:

Nishikigoi are ornamental versions of the Common Carp (*Cyprinus Carpio*) bred for their colour and patterns. Common Carp originated in the Caspian Sea and through natural catastrophes over several millennia and the intervention of primitive man began to spread eastwards and westwards into Asia and Europe. These migrations were sporadic and over the centuries resulted in isolated populations of Carp inhabiting waters far away from their origins. These isolated feral populations evolved characteristics of their own through natural selection, mostly colour variations to enhance their survival in their new surroundings.

As man evolved from hunter-gatherer into a farmer, carp were seen as a valuable source of protein and their enforced migration accelerated. By 1300AD they were being reared commercially in Europe and had reached the extremities of the Eurasian continental landmass. In the process they had developed into several distinct strains so much so that *Linnaeus* described some as sub species. That might have been going too far, but there were certainly some distinct differences in the carp from these diverse areas mainly in their colour, but also in body shape. Carp reared in river systems had a more torpedo

shaped body, whereas those raised in lakes and ponds tended to be deeper bodied. A scaleless variety was also produced in the Germano-Austro-Hungarian regions which is now common throughout Europe and known as either the Mirror or Leather Carp.

During the historical period of Japan known as Hei-an (794-1184AD) 'fancy carp' production was already underway with carp introduced from neighbouring China and Korea; Later, between 1550-1700 Japan also received carp from Portugal, Holland, Britain and Germany.

These carp, of varying hues (Blacks, browns, bronze and even some with gold scale edges) were imported for two reasons; One - for the ornamental lakes and moats of the aristocracy and two - for aquaculture as a cheap source of protein for the peasant classes.

This re-uniting of these ancient and very diverse gene pools produced some extremely unique and never seen before results under the husbandry of the Japanese carp farmers, e.g. reds, blues and non-albino (leucistic) whites. From these accidents of nature came the forerunners of modern day Nishikigoi, which through selective breeding have become the show varieties of today.

Carp and their influence on Japanese mythology:

Imported from China alongside the carp came a system of writing, the Buddhist religion and some folk tales. One of these tales concerned the carp. A fish that forces its way up powerful rivers, swims up water falls to eventually turn into a dragon. The relevance of this is very important to this paper. Carp are seen by the Japanese as symbols of strength, patience and a determination to achieve goals. Characteristics that they wish to impart onto their children, especially the boys. In Japan, May 5th is known as 'Boys day' and symbolic flags in the shape of carp are flown outside the houses of families with sons. Although Nishikigoi are not as widely known in Japan as one might think; Carp are an integral part of their culture.

Show Standards:

Are based on 7 elements of appreciation: which are:-

Body Shape
Skin Quality
Colour
Pattern
Elegance
Imposingness
& Deportment

The first four are used for garnering positive points at shows and the final three used for establishing winners when all else is equal.

We draw your attention to the first element - "Body Shape" this doesn't just refer to the shape, which by the way is aligned to the riverine carp of mythology - i.e. strong and powerful; it also covers deformities of which there should be none. A good show Koi has to be well proportioned, fit, strong and healthy. Along with Skin Quality it is jointly the most important criteria for winning an award.

Show Varieties:

These are basically the colour variants, and each has their own standard relating to pattern, i.e. the arrangement and the apportionment of their permitted colours.

Selective breeding:

The creating and maintaining of the Show Varieties requires selective breeding and as in the breeding of many other animals this occasionally results in some unusual and unwanted side effects. For example, body and fin deformities, absence of fins, poor health and genetic weakness. Due to the special relationship with the carp these abnormalities were not tolerated and throughout the history of Nishikigoi breeding there is a long tradition of back-crossing with feral carp to re-establish correct body shape and vigour to breed out these unwanted traits.

However, there are now some breeders straying from this old ethic, (See 'Commercialism') a trend that the ZNA and the BKKS have been keen to discourage.

Commercialism:

Sadly, in recent years there has been some deviation from the age-old tenets of Nishikigoi production driven by overseas markets and the influence of other pet fish cultures.

Cross breeding Nishikigoi with a non monophyletic^{#1} Chinese species of carp in Indonesia has resulted in hybrids with long fins, long barbels and pom-pom nostrils. The term 'hybrid*' is very important here as hybrids are banned from Koi shows under Japanese rules. But over time these hybrids have been selectively bred to take on the patterns and colours of Koi and are marketed as variants of the true Nishikigoi. They are also being marketed as "Dragon-Koi" in Asia in a ploy to exploit the association between carp and dragon. Outside of Asia they are marketed under the name of Butterfly Koi.

Another more recent development is the 'Balloon or Ball Koi' a long fin deviant with a shortened body reminiscent of some Goldfish varieties.

Both of these developments are shunned by the true Nishikigoi fraternity and are explicitly excluded from most shows, including the South East's.

Cosmetic surgery:

This sadly is another practise that was becoming increasingly common. Nishikigoi patterns occur naturally and play a part in the Show Standards. This has sadly led to some breeders and traders surgically altering patterns to make the Koi more desirable and to therefore command a higher price. Suspicion of cosmetic surgery was made a cause for disqualification in 2003.

Tattooing:

This practise was thankfully short lived, but serves as a good example of how Koi Shows can be a force for good. At a show in Japan in 1993 two examples of tattooing were detected during the later stages of the judging. A conference ensued and the two exhibits

were stripped of their prizes and disqualified along with their owners. The message from the Koi Show was clear and to date no further examples of this practise have been recorded.

GM and injected dyes:

Genetic modification using squid genes has been used to create fluorescent variants of some tropical fish species. There have also been incidents of injecting *day-glo* dyes to produce false patterns. Neither of these practices would serve any purpose with a Koi show exhibit, as the effects they would create do not fit within any existing variety's show standard and would therefore not benefit the practitioner.

To date; there are no records of either of these practices being used in the production of Nishikigoi. However, should they occur the South East Koi Club's Show Committee has passed a resolution banning them from being exhibited at the South East Show.

Summary:

Rather than be the force driving the introduction of practises mentioned in, or similar to those in the BBC programme, the Koi community is determined to put a stop to them; and the Koi Show, its rules of appreciation and its judging standards are seen as the means of achieving this.

1: Body shape^{#2} is the bedrock of Koi appreciation when judging and any deviation from the standard seriously marks down a Koi in a show. Genetic abnormalities that disfigure the Koi or impede natural behaviour will also prevent a Koi from even being accepted into a show.

2: In February 2003 the ZNA passed a ruling that mere suspicion of cosmetic surgery is enough for a judge to disqualify a Koi from the competition. This rule is deliberately strict to send a strong message to the perpetrators. Within their competition rules there are no appeal procedures, the judges' word is final.

3. The South East's show rules, amended in 2007 specifically provide a definition for Nishikigoi "**Nishikigoi (Koi)** are ornamental versions of the Common Carp (*Cyprinus Carpio*) that originated from specimens selectively bred over centuries in Japan to produce distinct varieties based on their colours and patterns. The same definition applies to scale-less varieties produced through the introduction of the 'Mirror & Leather Carp' variants of *Cyprinus Carpio*. Only Nishikigoi are permitted as entries in the show."

They also state clearly that deviations from the true Nishikigoi are not permitted. "**Only Nishikigoi (Koi)** are permitted to be entered into the show and displayed in the vats. *Common Carp, Mirror Carp, Leather Carp, Ghost Carp, or any variant selectively bred for distorted body shape or excessive finnage are not by definition Nishikigoi and are therefore excluded from the show .*

4. In 2005 the BKKS instituted a rule to prevent "Long Fin Koi" from being exhibited in their shows.

5. In July 2007 the South East Koi Club adopted the ZNA ruling outlawing cosmetic surgery when they removed their show from the BKKS Show rules.

6. October 12th 2008. The South East Koi Club's Show Committee resolved to impose a ban on the exhibition of tattooed, dyed or GM modified Koi should they be produced.
7. On December 7th 2008, the BKKS Judging Standards Committee (JSC) decided to propose to the BKKS Council that they adopt a similar ruling outlawing cosmetic surgery.

References:

- ^{#1} Phylogenetic relationships of ornamental (koi) carp, Oujiang color carp and Long-fin carp revealed by mitochondrial DNA COII gene sequences and RAPD analysis.
Wang C.-h: Li s. -f [Aquaculture](#), Volume 231, Number 1, 5 March 2004 , pp. 83-91(9)
- ^{#2} All about – Body Shape. Kate McGill. Koi Magazine Issue 129 January 2009 pp 60- 65 (6)

Notes:

* The term 'hybrid' is used throughout this article in its true biological sense; that of an offspring produced from two closely related species. However, within the hobby of Koi-keeping this term has other uses which may cause confusion. They are mentioned here, purely for clarity.

1. Hybrid variety – a Koi that is created from crossing two Koi of completely different varieties, and therefore show standards.
2. New Hybrid™ - a brand name developed by the Japanese Koi breeder Yohei Nagasagi and his company 'Koi no Yohei' to denote that the Koi has the genes of a feral white carp used as an out-cross to improve the bloodline. There can be further confusion in relation to this brand name as the Japanese word 'Hiranaga' meaning 'broad and long', is often confused with the word 'Hirenaga' which is the Japanese for the long fin carp referred to in ^{#1}

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