

BREEDING THE EUROPEAN WAY

While you're surely aware of the advances British Koi breeders have made over recent years, did you know that your fellow Koi keepers on the Continent are also making similar progress? **Jos Aben** introduces his unique approach...



Jos Aben

Jos Aben lives in Holland and has been keeping Koi for the past 20 years. For the last eight years he has also been involved in breeding them for his company A&C Ponds and Gardens which is based in Holland.



Jos Aben is trying to raise the bar for European-bred Koi – and it looks like he's succeeding

For some years now I have been trying to breed high-quality European Koi that surpass all expectations. What I mean by that is that I have been trying to distinguish myself from my colleagues and the quality expected from European Koi – I want to prove that there is a different way of going about it. This has meant that I have had to learn a lot about Koi bloodlines and how to improve those bloodlines – which was easier said than done!

I started by visiting Japan, but those first few visits were more of a fiasco than a success as we expected to be received with open arms and for the Japanese breeders to share their knowledge with us just like that. I was very disappointed every time I returned home empty-handed and, what's more, with no explanation whatsoever. The first fish I bought were mainly show-quality fish that I thought, and was told, would be superb for breeding.

And, I must admit, that the results of the first few spawnings were quite reasonable. The number of worthwhile fish, however, never came close to being acceptable – I would be able to breed some fish, which were obviously European, but never enough to make it profitable. So we decided on a different approach to the entire breeding programme.

The importance of bloodlines

During my next trip to Japan I managed to talk to several breeders and this was when I decided to stop purchasing big Koi for breeding and to purchase smaller Koi with the potential to be parents in the future. These 15–25cm Koi were very hard to obtain, however, and were no cheaper than the big show-quality fish I had previously been buying. During each subsequent trip to Japan I was lucky enough to purchase three or four Koi with breeding potential.

The disadvantage associated with Koi like this, however, was that they were only one-year old, which meant I would have to wait two to four years before they could be used in the breeding programme. Today, however, these are the Koi that are accounting for our good results.

Of course, these results have not been that easy to come by. It is important to set up a breeding programme with a suitable bloodline, which means that the fish you put together have to 'fit' in order to produce the optimum result; knowledge of the bloodlines is essential. I chose the easy way, by purchasing a lot of fish from one bloodline. I then let them grow for one to two years before deciding whether or not to continue with the line in question.

All about the minerals

Fish of a certain bloodline that appear perfect in Japan do not necessarily show

the same quality anywhere else – I'm sure many Koi keepers have seen the quality of Koi diminish when they arrive in Europe. This often has to do with different water conditions, food and the mineral content of the water – Japanese water is much softer and richer in minerals than ours in Europe. This has a great influence on the development and colouration of Koi. In order to know for certain which bloodlines react best in Europe, you have to test them. That is why I still buy lots of Koi in Japan and keep them in ponds for one to two years in order to monitor their development. Only when this is to my satisfaction do I move over to purchasing fish with breeding potential. You have to remember that it is a slow process but, in my opinion, it is the only way to be sure of the potential development of a bloodline. For the same reason we put the Koi out in our ponds without treating them for any bacterial

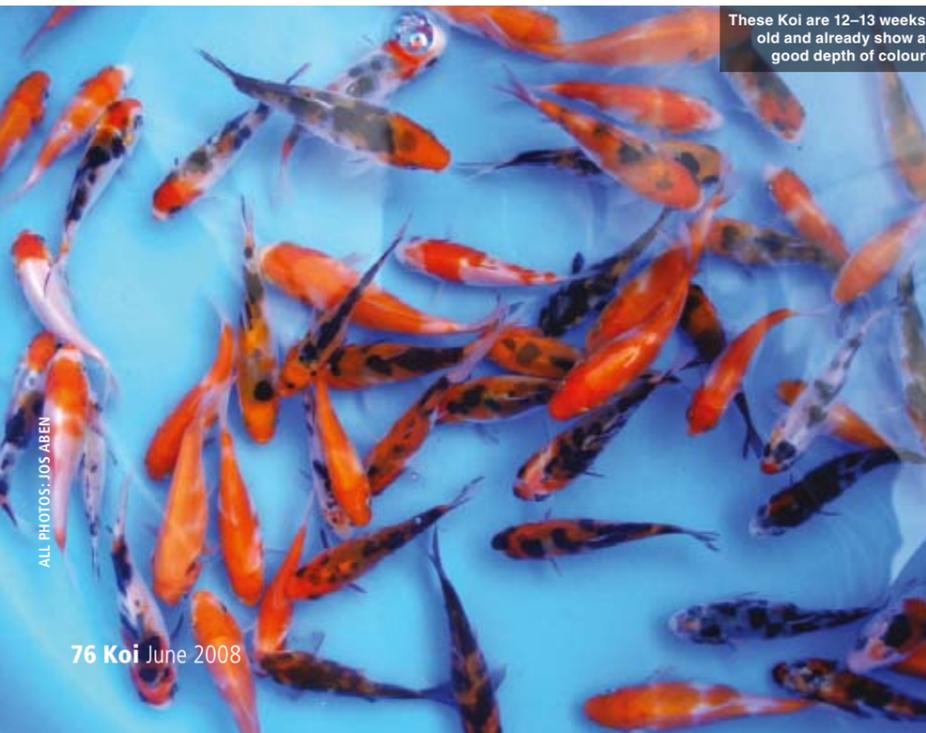
infections. We do treat them for parasites, but we like the Koi to overcome all other diseases naturally. If Koi from one bloodline suffer from more infections than another bloodline, or do not develop in a positive way, they are excluded from our breeding programme. This grants us a good insight into the bloodlines in general but, above all, those which are most suited to the conditions we have in Europe.

Many Koi keepers think, like I used to, that the best and most beautiful fish are suited for breeding. When it comes to the best, this is undoubtedly true, but definitely not for the most beautiful in so far as pattern is concerned. Far more relevant is the transmission of pigmentation and body shape. Only if you learn to recognise this and build the breeding program upon these qualities will you have a chance of success. So far we have been able to create good bloodlines from Kase, Aoki, Tanaka, Sakai,

Yamazaki, Dainichi and Isa Koi and we are testing some from Kansuke, Kaneko and Koda too. We have also started breeding some new varieties.

Nature knows best

As far as the breeding itself is concerned, I prefer the natural way of doing things rather than injecting the Koi. This does result in fewer fertilised eggs, but it also causes significantly less suffering and secondary problems for the parents. After spawning we house the young fish in polytunnels where we have better control over the temperature. The young Koi stay in these ponds for about four weeks until the first selection; at that time they are 2–3cm long on average. During the first selection we remove all the young fish that are not of the variety we intended and then all those with anomalies. Finally, we look at pigmentation and the quality of the skin; We end up >



These Koi are 12–13 weeks old and already show a good depth of colour



At nine-months old the individual varieties become much easier to pick out



This 37cm Beni Kikokuryu is simply stunning and would stand its ground against a Japanese-bred example



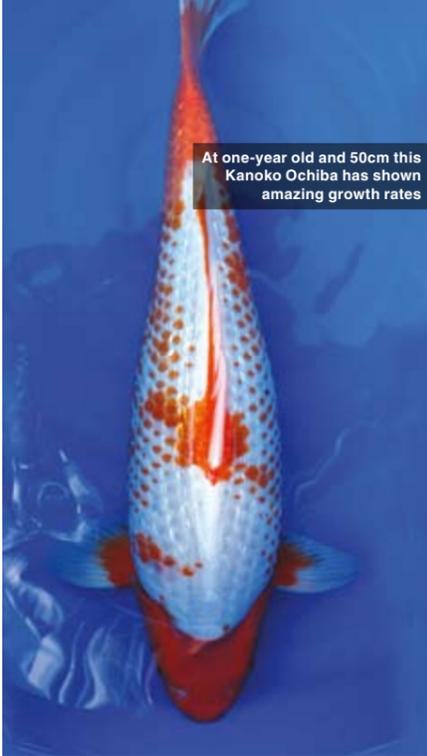
At two-years old, this 50cm Hariwake has a great shape and glistening white skin

KOI KEEPING

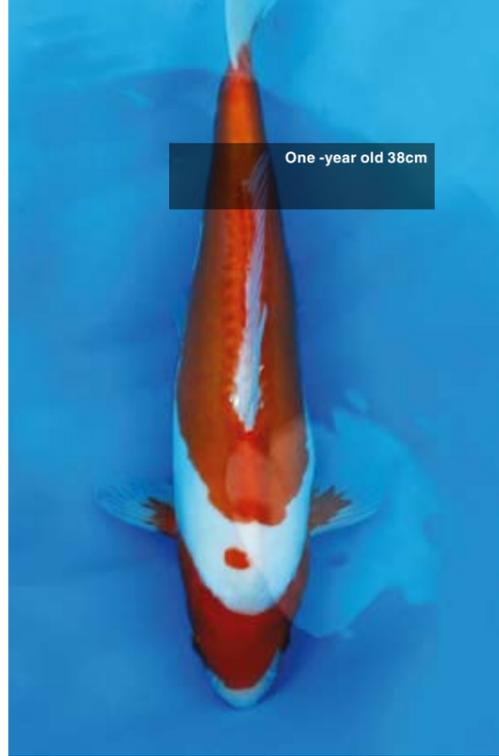
This 38cm Beni Kikokuryu is a very good example of the strong colouration these Koi are known for



At one-year old and 50cm this Kanoko Ochiba has shown amazing growth rates



One-year old 38cm



► with around 150 Koi out of every 1,000 bred. After selection we move the Koi to our other polytunnels where there are larger ponds in which they can grow-on.

Another four weeks later they are caught and selected again; the fish are now 4–7cm long on average. During this selection we pay special attention to body shape and colour. Fish that are ungainly or too short are removed; only the ones that are long and have well-placed fins survive this selection. As far as colour is concerned, we pay special attention to gloss and the depth of pigmentation. At this age many young fish completely lose their colour – these also have to be spotted and removed – which makes the number we are left with shrink drastically. If we discover any fish which stand out, these are set apart, while all the other selected fish are placed in smaller ponds. Meanwhile, selection has reduced the number of Koi from 100,000 to 7,500.

Only the best

After our initial rounds of selection, we then concentrate on the fish we have set aside – these are the ones that are most interesting to us so we grow them on in big outdoor ponds. These ponds are lined with foil over which we spread a specially prepared clay. To this clay we add our own mixture of minerals, enzymes and trace elements which support undisturbed development of the Koi's pigmentation. This brings out very strong colouration which, in my opinion, gives us a good head start over the other Koi breeders in Europe. A pigmentation problem in Koi is often to do with insufficient cell building, which is predominantly caused by a lack of minerals; we have tried to rectify this by adding this special lining and mineral-enriched clay. These fish stay in the same ponds for the rest of the year; only in late autumn do we net them out again for a final selection.

By that time, the fish in the smaller ponds have gone through another two or three selections, reducing the original 100,000 to around 750 that we consider good enough to keep through the winter. Of these 750 fish, about 100 will turn out to be of a good enough quality to grow-on to two-year olds. So, if we breed 1,000,000 fish, only 7,500 saleable fish remain, of which no more than 500 stay with us for another year.

Currently, in Poland, we have started a joint project consisting of 65 ponds; eventually, over 3,000,000l of water will be contained indoors. The indoor section will be subdivided into several basins and ponds, and will serve as the sales space – watch this space for more about this project. ■

FOR MORE INFORMATION

You can visit the A&C Ponds and Gardens website at www.aenc-koi.com

The Koi that A&C breed from have been selected after months of trials to assess their bloodline



78 Koi June 2008

The site used by A&C is extensive and has ponds, like these breeding ponds, for all stages of a Koi's development

