



Discus Fish – Made in Germany

An interview with the Stendker Discus Fish Hatchery



Devoted to discus fish: The Stendker family and their staff. Photo: Stendker

H. STENDKER

Because I'd always been interested in discus fish, I decided to start with a slightly larger 300 litre aquarium, in which I kept four discus fish with some Cabomba and two Echinodorus plants. The discus fish were obviously comfortable in their new environment, because it didn't take long before they began producing offspring.



What a crowd: Each of these large Pigeon Bloods is more beautiful than the next. Photo: Stendker

The Stendker Discus Fish Hatchery is the biggest discus hatchery in Europe and one of the biggest in the world. In 1965, Heinz Stendker laid the foundation for today's family business with a pair of discus fish, which produced approximately 1,000 offspring. His two sons, Jörg and Volker, have been running the company since 1998.

AMAZONAS

To begin with, would you describe for our readers how your love of discus fish first began? Did you start out with a standard 54 litre aquarium, like the rest of us, or did you set your sights higher, right from the start?

H. STENDKER

Because I'd always been interested in discus fish, I decided to start with a slightly larger 300 litre aquarium, in which I kept four discus fish with some Cabomba and two Echinodorus plants. The discus fish were obviously comfortable in their new environment, because it didn't take long before they began producing offspring.

AMAZONAS

How were you able to get your sons interested in discus fish too?

H. STENDKER

That wasn't difficult at all. My sons grew up around discus fish and developed an interest in them pretty quickly. Over time, their fascination for the fish continued to grow.

AMAZONAS

At what age did your sons Volker and Jörg begin helping you to breed your discus fish?



One of the spick and span aisles in the hatchery, with fully-grown discus fish. Photo: Stendker

H. STENDKER

My son Volker began showing an interest in the technical aspects of aquarium-keeping at around 11 or 12 years of age and this is now his field of expertise in the hatchery. My son Jörg took a little longer until he too became involved in breeding discuses, at the age of about 13 or 14. He particularly enjoyed helping to seek out feed sources, like catching mosquito larvae, for example.

AMAZONAS

Today your company is one of the leading discus fish hatcheries worldwide and you ship fish to countries all over the globe. How many aquariums does your hatchery maintain and how many discus fish do you have on stock?

H. STENDKER

Currently we have just over 2,000 aquariums in operation, with around 180,000 to 200,000 fish.

AMAZONAS

That's an impressive number of fish.

H. STENDKER

Well, yes, that sounds like a lot, and it is a lot of fish, but we're lucky enough to receive orders for approximately 20,000 fish per month. As it takes a while for a discus fish to reach a suitable selling size, we need to make sure we're rearing enough juvenile fish to keep up supplies.

AMAZONAS

And where do your magnificent discus fish end up being shipped to?

H. STENDKER

Today, we have customers in around 20 countries. Our most important export markets are France, the Netherlands and the USA. Naturally, many of our discus fish remain here in Germany too, but you can also see them in aquariums as far afield as in South Africa.





One of the hatchery's shelves of aquariums, in which smaller juvenile fish are reared. Photo: Stendker

AMAZONAS

Which technological aids do you use in your discus hatchery?

H. STENDKER

Well, we try to keep the technical side of things as simple as possible. That's why we prefer using sponge filters as our sole filtration. Reverse osmosis equipment is also something you can't really manage without, in a discus fish hatchery.

AMAZONAS

It's common knowledge that regular water changes greatly improve the fishes' growth. How do you carry out water changes in the hatchery and how often is the aquarium water exchanged?

H. STENDKER

In our hatchery, we use a continuous-flow system, which exchanges 10 – 15 % of the total water volume per day. For a hatchery of our size, this has proven to be the most effective solution. This percentage of water is exchanged on a continuous basis, i.e. over the space of 24 hours. This ensures steady water quality.

AMAZONAS

I can't help but ask you about the use of medications in the discus breeding field, especially as the term "flagellate-free" is currently on everyone's lips. Many less well-informed discus owners seem to think that juvenile discus fish can only be reared in aquarium water brimming with medication.

How do you deal with the problem of infections and how do you ensure your juvenile fish stay healthy as they grow?

H. STENDKER

Yes, this is a much-discussed topic. Our approach is to make our discus fish more resilient, to "harden" them, by maintaining high stocking densities in our aquariums, which keeps the so-called "infection pressure" high. Thanks to our high-quality feed and – as I described just now – by maintaining steady and high water quality, we've not needed to use any medication at all, for over three years running now.

AMAZONAS

Do you find that some fish still lag behind in their growth? And do you have any advice on how to remedy this?

H. STENDKER

Of course, that happens every now and then. But it's actually quite easy to deal with. All you need to do is to place those discus fish, which are lagging behind in their growth, in a separate aquarium. By raising the water temperature from 29 °C to 32 °C, their growth will have improved markedly within about two to three weeks.



Later, the juvenile fish are moved to 500 litre aquariums, stocked with up to 500 juvenile fish. Photo: Stendker

AMAZONAS

Could you describe how your spawning aquaria differ from the aquaria, in which you raise the juvenile fish?

H. STENDKER

Our spawning aquaria have a capacity of approximately 80 – 100 litres, which is absolutely sufficient for a discus pair and their brood. The aquaria in which we rear our juvenile fish have a capacity of up to 500 litres. We keep our spawning aquaria as clean as humanly possible. For example, we don't add substrate to these aquaria and we clean the inside of the glass panes regularly. We stock the 500 litre aquaria, which we use for rearing, with either: 100 fish up to 17 cm in size, 150 up to 14 cm in size, 200 fish up to 12 cm in size, 300 fish up to 10 cm in size, or 500 fish up to 8 cm in size.

AMAZONAS

Those are quite impressive stocking rates. Could you tell us about the water chemistry values in your hatchery?

H. STENDKER

Well, in our breeding aquaria, we naturally try to maintain optimum water chemistry values and we use treated water for these aquaria. As a result, the general hardness value is 1, the carbonate hardness is lower than 1, the pH value is between 5.5 and 6.0, the conductivity value is 250 $\mu\text{s}/\text{cm}$ and the water temperature is 27 °C. For the aquaria in which we rear our juvenile fish, we use tap water with a conductivity value of 800 $\mu\text{s}/\text{cm}$, water temperature of 29 °C, a general hardness value of 16 dGH, a carbonate hardness value of 8 °KH and a pH value of around 7.0.

AMAZONAS

Which technique do you prefer for hatching the fish larvae, or do you simply let the parent fish carry out the brood care?

H. STENDKER

Overall, we prefer the parent fish to carry out the brood care, or if this is not possible, that a substitute pair of fish acts as “foster parents”. For the Pigeon Blood varieties it's often necessary to use such “foster parents”, as the parent fish cannot darken their colouring. Then, the larvae do not attach to their parents, causing the breeding rate to become insufficient.

AMAZONAS

Are there currently any new trends in the discus breeding field, or are breeders rather trying to stabilise the specific traits of existing varieties?

H. STENDKER

We're not observing any tangible trends at the moment. We're trying to stabilise the traits of particularly unique colour varieties among the existing discus fish types, so that their colouration traits become even more distinctive, and also so that new traits can establish themselves and begin to stabilise.

AMAZONAS

How long does it generally take for a new colour variety to become established and until you can market it as a new breed variety?

H. STENDKER

If everything goes smoothly, then you can establish a new colour variety after about eight to ten years. However, as a rule it usually takes about two to three years longer than that. And in some cases I've even been working on a particular colour variety for 18 years, now.



A pair of Red Spotted Snake Skin discus fish in a breeding aquarium. Photo: Stendker



The Red Pigeon Blood is currently by far the most popular and best-selling discus. Photo: Stendker

AMAZONAS

Do you have a favourite discus colour variety, which you've been seeking to maintain unchanged over a long period of time, or in which you're only trying to make minor improvements with respect to certain standards?

H. STENDKER

I still really like the Red Turquoise discus fish and try to further improve this colour variety as regards shape and colour. While the overall appearance is also very important to me, my emphasis is ultimately on its red colouring and on the pattern of the fish's lines.

AMAZONAS

Do you crossbreed existing breeds with wild discus varieties?

H. STENDKER

No, these days we no longer do that. I think the last time we did that was around 15 years ago, we crossbred using Alenquer and Santarem discus fish.



This wild discus variety has been bred in captivity for many years now, under the name "Alenquer". Photo: Stendker

AMAZONAS

Are there any wild varieties that you try and maintain in their original form?

H. STENDKER

Yes. While we no longer crossbreed these varieties, we do try to maintain the Alenquer and Santarem varieties, which I just mentioned, in their original form and colouration, as much as possible. We rear approximately 10,000 fish of both varieties per year, in order to have ideal numbers for the selection process. We place a big emphasis on a round shape, vibrant colours, excellent fins, the absence of imperfections in the fish's stripes, as well as good reproductive capabilities.

AMAZONAS

What is currently your most popular discus fish as regards sales, and do tastes change over time?

H. STENDKER

I think currently the most popular varieties are Red Pigeon Bloods and Blue Pigeon Bloods. In the past, Brilliant Turquoises used to be the most popular, and for a while the Solid Turquoises and the Red Turquoises sold best. Currently we're also seeing increased demand for the Marlboro varieties.

AMAZONAS

And finally, we must ask you the all-important question as to what you feed your discus fish. What feed do you use, to produce the exquisite discuses you sell?

H. STENDKER

We use a feed-mix, which consists of beef heart, "noble sweet" paprika powder, Cyclopes crustaceans, vitamins and minerals.

AMAZONAS

Thank you very much for this interview and for the valuable information you have provided for our readers.

This interview was conducted by Thomas Weidner