



FACTFILE

- **Time in the hobby:** Four years
- **Favourite fish:** *Apistogramma* (currently housing 19 species).
- **No. of tanks:** 21
- **Most paid for a fish:** £65 for a pair of wild caught *Apistogramma* sp. *cruzeiro* and £30 for a male *Apistogramma* *vielfleck*
- **Other fish kept:** *Nannostomus* pencilfish (*beckfordi*, *eques*, *marginatus* and *trifasciatus*), *Copella nigrofasciata* splashing tetra plus L144 Blue eyed and Super red bristlenosed catfish.



Fast track fish rack

Nathan Hill meets a recent addition to the aquatic fraternity who has managed to construct an enviable fish house, with a collection that could have been unimaginable or at least immensely difficult to source only a decade or so ago.

Traditionally speaking, aquarists used to take a convoluted journey through the hobby before eventually settling down and arriving at a particular genus or family that took their fancy. Fishkeepers would often dabble in a bit of everything, from brackish to goldfish until finding their feet.

Peter Clarke is indicative of a newer generation of aquarists, with enhanced information access and faster, wider networks of contacts than ever before. I'll concede that when I was on the road to his home in Chesterfield, Derbyshire, I was apprehensive. I've met a few newer fishkeepers who have been brimming with energy, only to be so over eager or so fixated on one aspect of the hobby that they end up overlooking key features like hygiene or aesthetic credentials. It was with a sense of foreboding that I wondered how I'd react if I were greeted with rows of coloured gravel, handfuls of fluorescent skulls and mediocre fish.

In the event, my trepidation was entirely unnecessary. Peter's system, emanating the soft, ochre tones of Amazonian blackwater and teasing with flashes of colourful, rare fish, completely blew me away. Here is an aquarist who very much has the 'wet fingered' touch and it shows.

Peter has been keeping for a scant four years, entering the hobby through the generosity of a friend who gave him his first ever fish: Kribensis cichlids, *Pelvicachromis pulcher*. Within a week of having them, this initial species had spawned, securing Peter's love for fishkeeping. Since then, he's been a non-stop cichlid procreator, breeding many species that remain elusive to others.

It was just months after breeding his *Pelvicachromis* that Peter started expanding his horizons on the Internet. Soon he'd stumbled across and joined the British Cichlid Association, with which he remains active to this day.

From there, his interests were decidedly cichlid. He played with some of the usual suspects such as Keyholes, angelfish and even Jaguar cichlids, before chancing upon *Apistogramma cacatuoides* sp. 'red' about 18 months back. That was the day everything changed, and since then it's been an Apisto frenzy. Peter has bred over 30 species to date and currently has 19 scattered throughout his 21 running aquaria.



Peter's current fish list

- *Apistogramma* sp. Vielfleck (F2)
- *Apistogramma elizabethae* (F1)
- *Apistogramma* sp. Kelleri (F1)
- *Apistogramma luelingi* (F1)
- *Apistogramma tucurui*
- *Apistogramma pebas* (F1)
- *Apistogramma abacaxis* (F1)
- *Apistogramma cacatuoides* white/golds
- *Apistogramma cacatuoides* quad reds

Wild species

- *Apistogramma barlowi*
- *Apistogramma norberti*
- *Apistogramma baenschi*
- *Apistogramma steindachneri*
- *Apistogramma bitaeniata* 'Shushupe'
- *Apistogramma eremnohyge*
- *Apistogramma pantalone*
- *Apistogramma atahualpa* 'Sunset'
- *Apistogramma iniriidae*

Apistogramma sp. Vielfleck.



Décor highlights

Looking at Peter's tanks, you're instantly assaulted with images of wood tangles, thick carpets of tannin-leaching leaves, and sprigs of green cutting through the orange hues of the water. It all feels very, very natural, as though he's just carved up actual stream banks from South America and brought them home complete.

From a biotope purist point of view, the pedant might pick some holes. The plants are mainly African *Anubias* species or Asian mosses. Other greenery includes floating Amazon frogbit, Water lettuce and some untethered Indian ferns.

The leaves are mainly English oak and beech, with Indian almond tossed in for good measure. The wood is globally sourced and the sands, European. And for all of this, the fish care not one iota. Their colours flash, they hug clutches of

fry close to their nests and, to all intents and purposes, they may be in some Peruvian puddle.

Peter is not shy with leaf litter, to the point of using whole branch tips for an upright, sea fan effect of leaves. He'd use more, he tells me, though at the expense of seeing the fish, which would then never emerge from it. As it is, it's more common to see an Apisto snout poking out from sunken foliage than not.

Underneath those leaves is a bed of black Limpopo sand, which further helps to bring out the colours of the fish. Peter has used silver sand in the past but found that it compacted too much, leading to stagnant, dark patches. He notes with a wry half-smile that darker substrates help to hide some of the dirt and debris inherent in biotope style set-ups. His decoration also consists of a

mix of Redmoor wood and bogwood, a dash of Mopani wood, sprinklings of alder cones and Savu pods in each tank. As well as giving a visual edge, this natural littering has a beneficial effect due to the antibiotic and antiparasitic chemicals that it leaches.

Tank features

The tanks themselves, mainly 60 x 30cm/24 x 12" standalone aquaria, are housed on fish tank racking that Peter found on eBay at £30 a rack. The glassware was sourced locally from an aquarist looking to leave the hobby. For £150, Peter picked up over 20 tanks.

He's made some personal tweaks to the racking, incorporating a mixture of thick polystyrene on the back and sides of each, as well as double foil loft insulation, the bubble wrap style heat shield that helps to retain all of his tanks'

essential warmth. Rather than go down the path of heating the whole room, Peter has gone to the trouble of making his systems into thermal pockets so that he can heat the tanks individually for minimal wattage. No expense is spared on the 50w Eheim Jäger heaters that sit in every tank.

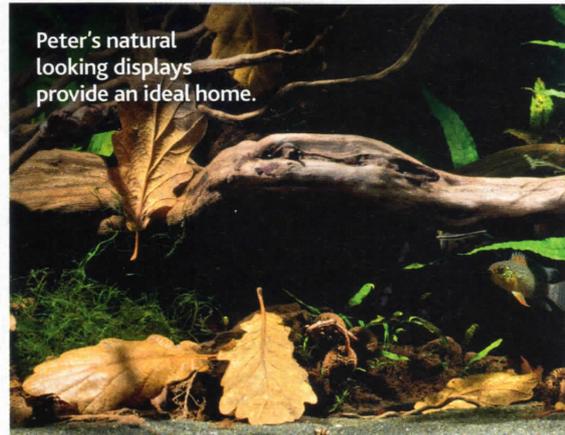
Filtering each aquarium is a single JAD SF102 air-driven foam filter, which gives ample mechanical and biological coverage. Powering them is a network of airlines hooked up to a single 460 lph koi blower that sits beneath the racking.

Lighting is taken care of with simple, domestic T8 LED tubes. At 16w each and with one covering two tanks at a time, the running costs are low, and Peter notes that since he's started using them his algae has declined, with the classic 'black spot' algae disappearing within weeks of installation.

Apistogramma elizabethae.



Peter's natural looking displays provide an ideal home.





A male
Apistogramma pebas.



A female
Apistogramma pebas.



*Apistogramma
pantalone*.

How does Peter find his fish?

Peter's displays are bestrewn with many rare and unusual species that you'll struggle to find at your local retailer. Even some specialist stores may agonise over tracing some of them.

The Internet has helped, as has hooking up with the British Cichlid Association (BCA), where like-minded breeders and keepers reside. Attendance at auctions, especially those in Redditch, Worcestershire, has helped to source fresh bloodlines. Ever eager, he's set up his own Facebook group — UK *Apistogramma* breeders/keepers — and founded the Chesterfield Aquarist Society, all in the hope of increasing his Apisto circles.

Some of the fish are sourced from retailers further afield. Rare Aquatics in Crewe, Cheshire is a favoured supplier and by clubbing together with several aquarists to make a bulk purchase, Peter manages to help dilute any carriage costs.

Selling fish on

As well as buying, Peter moves his Apistos on, taking them to auctions once they reach a sexable size. Initially, he ran into some hot water with local council officials who insisted that he obtain a pet shop license to continue, citing old passages from the Pet Animals Act 1951. He deflected this by registering with the BCA as a breeder, which is a handy tip for those wanting to avoid overly zealous council officials. Strangely, only one retailer has been interested in taking fish from him for credit, which makes me question the sanity of his local stores.



*Apistogramma
cactuoides white/gold*.

The benefit of having so many separate aquaria instead of one all-encompassing centralised system is that Peter can tweak water parameters on a tank-by-tank basis, which he does for individual species. His most acidophilic fish, for example, are kept as low as 4.0 pH with negligible hardness, while others are held around the 6.0-6.5 pH mark and with TDS readings of some 50-60ppm.

Courtesy of his water supply and low stocking densities, other water parameters pose no issues. Ammonia never rears its head, nor do nitrites, and even nitrates never accumulate to a high enough level to appear on his testing kits. In fact, it's only phosphate that he has to contend with, riding at 5mg/L.

Secret to success

The secret of Peter's great conditions is his water sources. With two massive water butts, one fed by a 450 gallon-per-day reverse osmosis (RO) unit and the other filled with HMA filtered water, he can tailor whatever he needs from these blank canvasses. He takes his RO seriously, incorporating an automatic float valve shut off, as well as a temperature gauge and fierce aeration. Nestled inside the tub, out of view, is a pouch containing two enormous peat balls sourced from Tyne Valley Aquatics, based in Northumberland, which help to replace the trace elements that the RO device strips out.

Using a half-and-half mix of the RO and HMA water, Peter performs

a 50% water change on every tank weekly. This isn't an easy or quick chore, though he does now run the water through a long hose straight into the garden, rather than lugging spine-bending pails of water in and out. He cleans all of his tanks in one sitting, usually on a Saturday, giving over three quarters of the day to aquarium maintenance.

Some aquarists might choke at the idea of spending that long maintaining a set-up, but for Peter it's all part of the passion. It's clear that he is very much the epitome of 'getting out what you put in' to the hobby when you see the clusters of fry, the flaring of an *Apistogramma*'s dorsal to a rival male through the wood tangles, or the natural courtship of a bonded pair heading off to lay some eggs.

Advice for beginners

Peter has a few tips for anyone thinking of diving into the *Apistogramma* world:

- Keep things natural or as close to a wilderness habitat as you can. Make the fish comfy and they'll settle right on in and start breeding before you know it.
- Keep tanks stable. Apistos don't like sudden stark changes in chemistry, so be careful not to cause any shocks when changing water.
- Absolute beginners should consider either *A. cacatuoides* or *A. borellii*, as these are two of the more versatile species. In fact, they'd even been an OK choice for a calmer community tank.
- Save a fortune by collecting up your own leaves! Ensure a safe, pesticide-free source and collect known safe varieties like oak, and your outgoings on expensive *Catappa* leaf purchases will wither away.

Peter's getting far more out of this than a long bank of leaf-riddled tanks might initially suggest. If you ever get the chance to see them in the flesh, you'll likely be envious too, no matter how long you've been in the hobby.

Be inspired

Peter doesn't perform any wild swings of water quality or indulge his fish in variations of temperature to get them spawning. His approach is much simpler and anyone with a suitable size, 60cm/24" tank spare could have a stab of their own. He'll set up a



Apistogramma eremnopyge.

tank with leaf litter and décor, set the parameters to the required pH and hardness levels for the species and add the female to the tank first. This allows her to establish her own territory. The male will follow after just a couple of days. Normally, within a few days more, they'll have started to spawn!

Peter always leaves the parents with the fry so that he doesn't break the bond that they have formed. He finds that aggressiveness from the female peaks and wanes over the period where the fry are growing. She'll be the first to see the fry off when she's ready to spawn again, though the male is pretty indifferent to the presence of the young. At this stage, Peter moves the juveniles to their own tank. At the early stages, he doesn't need fry food, as the leaf litter generates so much of its own natural infusoria and biofilm.

Peter always uses dither fish in his spawning tanks and finds that the smaller *N. marginatus* pencils or Splashing tetra are the best. They've even been known to do

their own spawning, though the fry are quickly picked off. The only fish that's really eluded Peter so far has been the mouthbrooding species, *A. sp. Kelleri*. He thought he was getting close once but soon afterwards lost the male fish to bloat. With a different batch, he eventually gave up and passed the fish on to another collector only for them to spawn straight away!

Bloodlines are important to Peter, and he notes that some farmed types are watering down the quality of fish available. He likes to outbreed fish, as opposed to inbreeding them.

Though it's known that some species can be bred closely between kin for 11 generations before deformities occur, he prefers not to go down that path. Instead, he likes to breed known, unrelated species to ensure that genetic diversity prevails.

Peter points out that wild fish take longer to bond in a tank than their farmed or tank-bred counterparts, possibly down to the difference between confined tank

spaces and the large roaming ranges that wild riverbanks present.

Food for thought

Peter's fish receive a more diverse diet than I do. Atop his system, sit numerous dry foods including Tetra Pro Colour, Energy and Algae; Tetra Prima Granules; JBL NovoGranoColor and others.

He also uses plenty of live and frozen foods and likes to keep things mixed up. Every day the fish will get something different, so they can either expect one of the dry morsels or *Daphnia* (which Peter cultures in a paddling pool in his garden) grindal worms, whiteworms, microworms and even *Artemia*, though he'll only ever use the varieties with added Omega-3 to counter hole in the head infections.

The only thing Peter doesn't feed is bloodworm, which he directly associates with bloat in his fish. Given how many species he's kept and how much he's immersed himself into all things Dwarf cichlid, I'm not going to question that!



Apistogramma tucurui.



Apistogramma luelingi.