

Second time around, an Iwagumi tank is far easier to set up.



Iwagumi revisited

There's been so much exciting innovation on the aquascaping front during the last few years and **Jeremy Gay** is just itching to set up a new aquarium using some of the shiny new products to have hit this expanding market.

It had been four years since I last set up an Iwagumi and with a great new tank and cabinet on the not-too-distant horizon, and a whole host of new planting products about to launch, I felt it was high time to put another one together.

Despite being well read on all things Amano we found that creating an Amano-esque nature aquarium four years ago wasn't altogether straightforward — and that's how we came to sign up the then new PFK planted tank writer George Farmer.

First time around

After meeting George and seeing his work, it wasn't long before we got him involved in setting up nature aquariums for us.

At the time, Estimative Index was the new black in planting, with hardcore aquascapers

making up their own potions from "dry ferts."

Launched by maverick plant guru Tom Barr, all the traditional rules were seeming to go out of the window in favour of high flow, high light (from multiple T5s) high CO₂, and actually adding nitrates and phosphates.

Four years on and Tom's ideas aren't quite so maverick any more, with major plant product manufacturers now actually adding nitrates and phosphates to their fertilisers. If you know what you are doing, the benefits will become obvious.

George came over to my house to set up a first aquascape. Between us we had a 120cm/48" tank, four T5 light units, external filter, Ecocomplete substrate, Mini Landscape rocks, CO₂, dry ferts, some "normal" Tropica plant food and the then new liquid carbon.

"Ditch your test kits. You won't need them," said George, and in the space of a day we set about carefully placing the rocks, painstakingly arranging thousands of individual *Glossostigma* plantlets and trickling the water in very slowly.

The gas was set to a 'deadly' dose of ten bubbles per second (I had been used to one bubble every two seconds prior to that,) and off we went. Happy days!

But things move fast in fishkeeping and, four years on, it was time to set up another one. So what's changed? Well, quite a few things!

Tanks

Fish tanks are evolving and changing over time, and in the last four years they've generally got smaller, with the arrival of nanos and even tinier picos.

Their shape has changed too, becoming more cubic, meaning a smaller footprint, and in many cases cheaper in both senses of the word.

Yet this isn't the fault of the manufacturers, instead a result of driving forces and one huge global retail nightmare occurring between 2006 and 2010 — namely the effects of the recession.

However it's not all bad, as there's been some nice stuff released too. Tanks and cabinets have become more lifestyle-led and finally evolved to blend with our IKEA furniture and glossy finished kitchens.

More attention has been paid to cabinet finishes, designs and materials, and now it's easier than ever to obtain a Japanese or ADA-styled cabinet, with clean lines and muted colours



The shallow rimless aquarium offers several vistas.

like grey, and the ubiquitous Optiwhite rimless aquarium.

It's amazing to think that just four years ago the "rimless" tank we used for that first Iwagumi was an old Hagen Duo 1200 with the hood taken off and black silicone.

George's first true rimless Optiwhite aquarium and cabinet had to be specially ordered from Germany at a cost of some £600!

Now you can just email or call Aquariums Ltd, based in the UK, tell the staff what you want and it's there!

However, this time I wanted to reflect another evolutionary leap in both in marine and planting circles: the shallow rimless aquarium. It's an OptiWhite tank that's wider front to back than it is tall. The benefits include thinner glass, meaning lower cost, huge surface area for gaseous exchange and loads of room for aquascaping. You don't need such bright lights to penetrate to the bottom either.

I took a deep breath, ordered one from Aquariums Ltd, and when it came I was over the moon. It's quite simply the best tank ever I've had!

I then ordered a new black gloss minimalist cabinet from ACS (a company which wasn't around four years ago either) and, having used both two companies, built a custom tank that is leaps and



Glass inlet and outlet pipes from TMC.

10 tips for a great planted tank

George Farmer offers some top aquascaping advice.

- Buy the best equipment you can afford and you won't need to upgrade later on.
- Don't skimp on filtration. Buy a filter that claims to turn over at least ten times tank volume per hour.
- Buy quality plants and plant heavily, especially in new set-ups.
- Get proper aquascaping tools, such as scissors and tweezers.
- Get into a routine. Set time aside for maintenance at least once per week.
- The more water changes the better — at least 50% weekly.
- Add a decent liquid fertiliser every day. In high-energy set-ups ensure nitrogen and phosphorous are dosed.
- Get your CO₂ levels and distribution spot on, especially with high lighting. Pressurised systems are the best.
- If you disturb the substrate, perform a 50% water change straight afterwards to avoid an algae bloom.
- Choose fish carefully to suit the aquascape and tank dimensions. Less can sometimes mean more.



The new V2 Powerbox external filter.

bounds ahead of what is usually on offer as ready-made items.

Lighting

The combination of increased energy bills, smaller tanks but with high lighting demands, recession and green issues caused a global change in thinking about lighting, which I think was for the better.

Four years ago there were few, if any, LEDs around and those were incredibly expensive, unreliable and couldn't cut it. Here and now we're all using them for our tanks, our kitchens, in our car headlamps — and they work so well.

I feel so much better about using them too, so for my cool new tank LEDs were a no-brainer choice. Two TMC GroBeam 1000ND LED tiles were fitted and I've never looked back. Their modern yet retro, industrial yet stylish looks have really grown on me. I don't want a shiny silver unit that looks like a bread bin any more. I'm LED through and through.

Substrates

Four years ago our thinking was a throwback to the European planted aquarium hobby of previous decades. This would consist of using a sand and soil-based substrate mix, topped with gravel, or a laterite base, topped off with



A glass diffuser and bubble counter add to the clean lines.



The finished tank in-situ.

something clean and inert. Ecomplete was revolutionary and still is a very good product, but these days it's all about soil. ADA was the first to bring out soft, granular soils, but then they were far from readily available. Now there are half a dozen or more on the market, with the ability to lower pH, and there's no need for heating cables or any top dressing. It can even be banked up and moulded, and TMC's latest NutraSoil offering does all the above, plus being available in great colours. I chose black, which is actually dark brown, and it's now my favourite soil. I can't go back to those pre-granular soil days!

Décor

Apart from soil, even the rocks have changed. Who would have thought a few years ago that the purist aquascaper would be happy



Side view of the Iwagumi created exclusively with Okiishi replica rock.

with pre-formed fake rocks?

Take a look at the resin rocky creations we've used here — Unipac's Okiishi. You would have real trouble putting an 80cm/32" long real rock into an 80cm/32" tank. It would be too heavy to lift and could even crack the tank!

Think about all the water it would displace too! These rocks are hollow, flat bottomed and look the

Your step-by-step guide to going green...



1 The Glosso pots came fresh from Tropica.



2 Carefully remove the plant from the pot.



3 Split the rockwool growing medium by hand.



4 Remove a portion of the plant from the rest.



5 Remove all rockwool and isolate a single plant.



6 Trim off the root and hold it with tweezers.



7 Again with tweezers, push the plant into wet soil.



8 Prune using scissors on a regular weekly basis.



From above you can see what a great job the lights, soil, CO₂ and ferts have done, at growing the *Glossostigma* carpet.

Who to contact

- Aquariums Ltd, www.aquariums.ltd.uk, 01704 892981.
- Aquarium Cabinet Solutions, 07834 245216.
- Tropical Marine Centre, www.tmc-ltd.co.uk, 01923 284151.
- Unipac, www.unipacpet.com 01604 705600.
- Tropica, www.tropica.com,
- Trimar, www.tropicalfish.org.uk, 01209 713639.
- Aquadip, www.aquadip.com

business. I reckon even Amano himself would have to look twice at these...

The aquascape

Through experience, and a lot of trial and error, aquascapes are getting better.

It takes a big leap of faith to order a non-standard shaped tank, a rock that's so big it has to go diagonally within that tank, and then to bank the soil up so high at the back it nearly breaks the surface! It's ground breaking and I love it!

You could even drop your water

level and have the *Glossostigma* growing immerse in the rear left hand corner of the tank.

These days aquascaping is all about thinking outside of the box, having a strong vision and the conviction to see it through.

You'll never create a great looking aquascape by taking any half measures. Or, of course, you could just draft George Farmer in to do it all for you!

With a minimal look, there is nothing to dislike!

EXPERT Q&A

Jeremy Gay answers some common questions on nature-style aquariums

What should I consider when setting up a tank of this style?

Ask yourself whether you have the time and the commitment to see it through. These tanks need attention to detail in both design and set-up, but most of all it's about maintenance.

George's instructions were to water change, algae wipe and dose the Iwagumi daily and, by following his instructions to the letter, along with daily pruning once the plants had grown in, I was the proud of owner of an aquarium that wouldn't have looked out of place in an ADA aquascaping contest.

However, lapse your maintenance as I did for just 48 hours when my daughter was born (I need to get my priorities straight, I know!) and I returned to a tank both overgrown and with algae problems.

For a lower maintenance, more

long-term planted tank opt for slower, less demanding species such as *Cryptocoryne*.

Which fish work best?

I'm a stickler when it comes to choosing fish for aquascapes, as I think they need to match it as much as possible. Include long, thin fish for long thin tanks, tall fish for tall tanks and generally keep just one large group of one species fish per tank.

With aquascapes such as an Iwagumi, keep the fish colours, shape and finnage really subtle – apart from when using Cardinal tetras, as they definitely work.

Try Ulrey tetras, shoals of subtly coloured rasboras, lampeyes, and ricefish. The fish should complement the cool, clean colour palette and should be an integral part of the display, not the main attraction.

Dwarf gouramis, guppies or a Siamese fighter won't work and their presence, coloration and shape draws too much attention.

Think about how the fish will move. Ideal is a shoal of small fish moving gracefully as one. Leave out anything that will just swim in one corner, waiting for food.

Is an Iwagumi aquarium for me? I think fishkeeping first...

Let's face it, these underwater Japanese rock gardens can look stunning and once you have created one or two, as I did with George's help, you may wonder why I would ever want for anything more, but I do...

The stark combination of large, grey rocks, open water and carpet of plants can be quite an acquired taste and, from experience, you need to be, well, a bit OCD to keep one going!

My tanks are usually much

more chaotic and untidy. It's therefore hard to change from a lifetime of aquascaping to hide a heater and filter, and setting up a tank with the needs of the fish in mind to setting one up for the benefit of the onlooker, the photographer, or even the aquascaping judge — and that brings me to my next point.

As well as not suiting all owners, Iwagumis don't suit all fish. With no tall plants, caves or shaded areas, but with open tops and

clear backdrops, the Iwagumi is not for shy or skittish fish.

In fact it's often the case that many species, when presented with such stark and open surroundings, will either jump out or dive into the carpet of plants covering the substrate.

Both can be terminal to fish if you aren't actually there to see one jump out, or if a poor fish dives so deeply into the tight mass of plant roots that they cannot get out again.

Both scenarios occur frequently within these tanks and as a fishkeeper first and foremost, not an aquascaper, this doesn't rest easy with me.

Furthermore, the term "nature aquarium" often applies as terrestrial scenes are replicated from nature, like hills, valleys and mountains, but I am yet to observe such clipped and controlled conditions actually underwater in the wild, and in real nature in general.

Stark and open surroundings don't suit all species of fish.

Shopping list

- Tank:** 80 x 60 x 30cm/32 x 24 x 12" braceless OptiWhite from Aquariums Ltd.
- Cabinet:** 80 x 60 x 80cm/32 x 24 x 32" minimalist gloss black cabinet from Aquarium Cabinet Solutions.
- Filtration:** V2 Powerbox external filter from TMC.
- Lighting:** Two GroBeam 1000 ND LED tiles with power controllers from TMC.
- Substrate:** TMC.
- Décor:** Okiishi replica rocks from Unipac.
- CO₂:** AquaGro expert set from TMC.
- Planting tools:** TMC tweezers and scissors.
- Glassware:** AquaGro glass range from TMC.
- Fish:** 24 White Cloud Mountain minnows, delivered by Trimar's mail order service.
- Plants:** Tropica.
- Plant food:** Tropica Nutrition Plus.
- Liquid carbon:** Easy life Easycarbo from AquaDip.
- Extras:** Two 90cm/36" Clearseal base mats, cut to size.



A Japanese spec nature aquarium, all achieved with good value products available readily here in the UK.

HOW TO SET UP YOUR IWAGUMI AQUARIUM



1 The empty tank. Don't skimp on kit as planted tanks rely on a combination of lighting, CO₂, substrate and liquid fertilisers.



2 The first 8kg bag of Nutrasoil goes in. It doesn't need pre-washing and can be poured straight out of the bag.



3 A second 8kg bag is added and the soil should then be spread out level across the base of the tank by hand.



4 The huge, one-piece Okiishi replica rock goes in. It's slightly over 80cm/32" long, so has to go in diagonally.



5 More soil is poured into the left corner, to bank the gradient up towards the surface of the tank.



6 Two smaller pieces from the Okiishi range are then placed in the front right, and rear left corners.



7 Water is added to the tank, initially with a watering can, to wet the soil prior to planting your greenery.



8 Small sprigs of *Glossostigma* are planted using the TMC tweezers. This will eventually give a lawn effect.



9 The rest of the tank is filled up using tapwater. A colander deflects the water to minimise soil disturbance.



10 Soil substrates may initially cloud the water. It will quickly clear once the filter is fitted and switched on.



11 One week on, prior to filter pipes being fitted. The lights use the TMC dimming controllers and the CO₂ unit is on.



12 The tank a few weeks later: cycled, the plants carpeting nicely, fish added, and glassware fitted.