AquaScapingWorld

Making Magic In Glass Boxes

Aquascaping with Nicolas Guillerman
How to Trim Stem Plants
Experimenting with Low Tech Methods
Creating Depth and Perspective
Do-It-Yourself ADA Stand Tips

www.aquascapingworld.com

VOLUME 1, ISSUE 3
MAY 2008

Letter from the Editor

Inside our May Issue

In every issue we like to include aquascaping guides and tutorials to help you improve your aquascaping skills. Great aquascapes will often feel like they can go on forever. This month we take a look at how to create depth and perspective in planted aquariums to get that effect through plant selection, good layouts, and photography techniques. This discussion pairs well with another article that explores trimming techniques that can refine your plants and scapes.

With summer around the corner, our do-it-yourselfers will enjoy reading tips on creating their own ADA aquarium stand. Making your planted aquarium look good is one thing, but to completing the look of the entire aquarium setup sometimes it takes some handy work. Learn to build a stand that matches your aquarium and house décor.

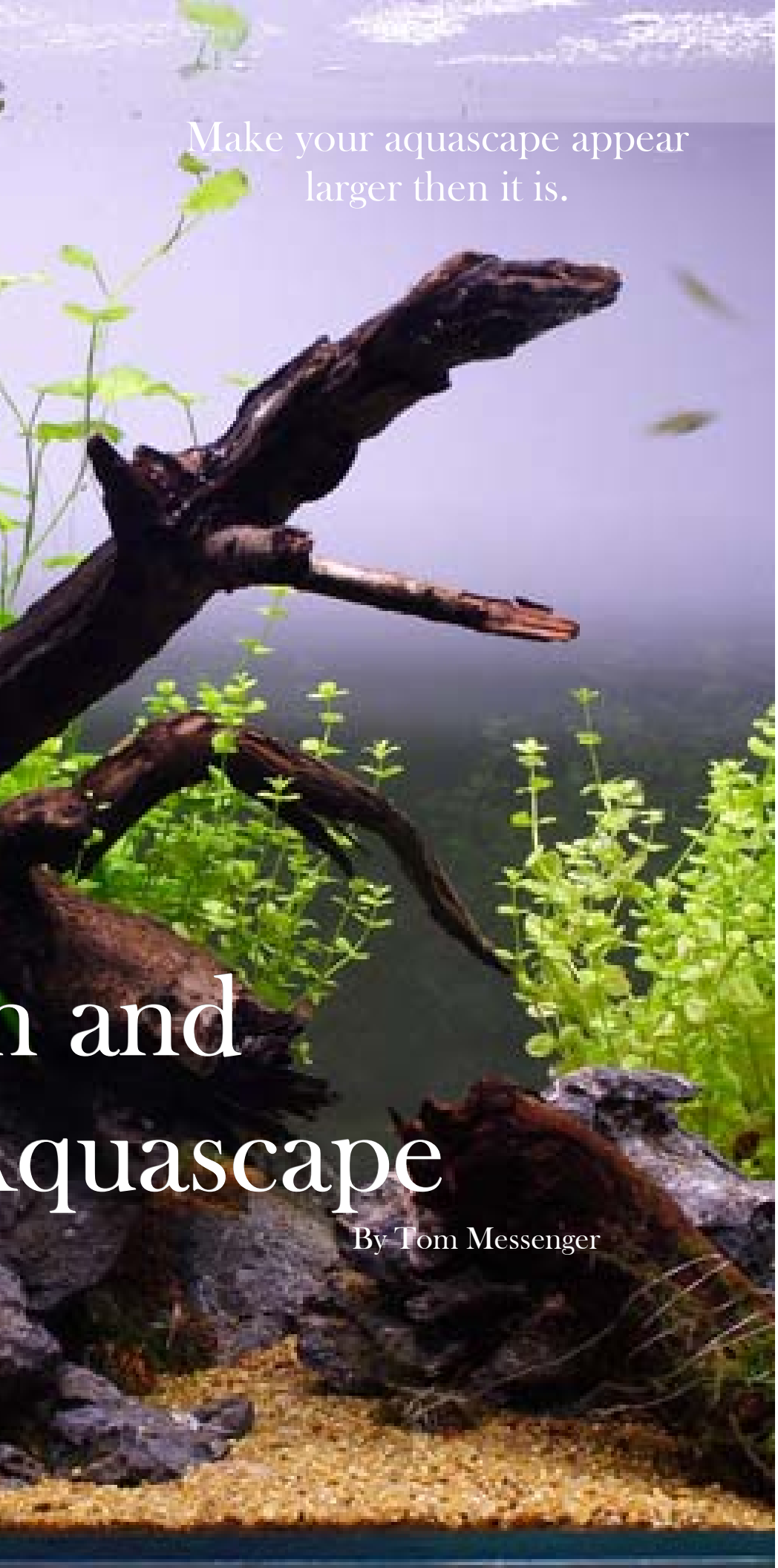
Last but certainly not least, our Aquascape in Focus features Andre Cardoso's "Pasodoble". His aquascape is a great example of how a well trimmed aquascape can capture nature's beauty in a glass box. As you'll find out in the article, creating such an aquascape isn't always an easy task.

Have fun with your aquascaping adventures this month!

John Nguyen
Editor in Chief
AquaScaping World Magazine

TABLE **OF** CONTENTS

Creating Depth
Perspective in an A



Make your aquascape appear larger then it is.

n and Aquascape

By Tom Messenger

I am going explain the principle of perspective, a very important consideration to take into account when aquascaping an aquarium. For the purposes of demonstrating these principles I have used photos of my own aquaria. There are a number of ways to give your aquascape perspective. I will explain how to create depth and perspective effectively.

The hardscape of my aquascape, *At Forest's Gate* illustrates the extent to which the substrate was sloped to achieve a greater illusion of depth/.

Substrate Positioning

Before you even begin to aquascape the aquarium, you can create a sense of depth and perspective using only the substrate. By sloping the substrate towards the back of the aquarium, you immediately give the impression that the tank is deeper than it really is.

Sand paths through the "centre" of the tank are popular, and can greatly increase the perspective of the aquascape. The path should start out wide at the front of the aquarium, and get progressively narrower the further back it goes. This gives the impression of the path disappearing into the distance. An excellent example can be found in Peter Kirwan's iwagumi feature in the April 2008 issue.

Choose the Right Plants

Small leaved plants are very effective at making an aquascape seem larger than it really is. In the past, I have had several people say my aquascapes always appear larger then they are. They assume my tank was 60cm or even larger. In actually the dimensions of the tank are mere 40cm (25l).

The trick is to use variety of small leaf plants that take up very little retail space in your aquascape. Place them in small groups. As these aquatic plants grow they will form a very dense and lush bush, without making the scape appear heavy or overly done. Plants such as Xmas Moss, *Riccia*, and *Mayacca* are excellent species to use because of their fine leave structures.

Fish to Fit Your Scape

The use of small fish such as Microrasboras (*Boraras spp.*) can really finish off a small aquarium. A school of 10 in a 25 litre aquarium can look impressive, and are well suited to the smaller aquaria.

In larger tanks, say 60 litres plus, schools of Tetras or Rasboras can have a similar effect. Larger fish such as Discus are best only kept for large aquaria, as they can force the aquarium appear smaller and can seem overpowering to a degree, distracting attention from the all-important aquascape.

(Top) Fine leaf plants make this aquascape look large in its small space
(Middle) Photo Shot at a 70mm focal length, lack of depth captured
(Bottom) Photo Shot at a much wider angle to emphasize the perspective

Photography

The way you photograph your aquarium can greatly influence its appearance or perspective. The pictures of my newly set up tank both show the same aquascape, at the same point in time. The only difference is, the latter has been shot at a much wider focal length. This increases the aquascape's apparent perspective in the photograph.

Notice how the aquascape in the wider photo (right) appears to shrink into the distance, whereas the other photo (left) seems flat, and two-dimensional.

Trimming Stem Plants

Get your plants to grow the way you want them

By Roy Deki

Have you ever wondered how some aquascapes have beautiful bushy type stem plants that help refine the scape? In this article I hope to help you achieve this look.

Different stem plants grow at different rates and maintaining these can seem like too much work. Faster growing stem plants will over power and shadow the slower growing stem plants. Proper trimming techniques are a vital part of maintaining a scape for a longer period of time.

The Bushy Affect

One thing to remember is to start with as many stems as possible, this will ultimately help create the bushy affect more easily and quicker. After the initial planting, all plants will go through an acclimation period or more simply put, the plant is in shock. Once recovering from this the stem will start to produce roots and you will see new growth at the top of each stem.

As the stem continues to grow you will notice that the best part of the plant will always be the tips. Let the plants grow to the water surface trimming only the stems that seem to out race all the others to the surface. Once the majority of stems are just below the water surface you can do the first mass trimming.

Before trimming this “mound” style aquascape.

Notice the angle that the scissors are held. The Micranthemum umbrosum is being trimmed to conform to the other two stem plants in the background.

The shaping of plants is complete and now it's time to wait for the new tips to form. Although the stems have been trimmed the over all balance of this scape has not been compromised.

This first trim should be done at about 3"-4", (depending on the entire depth of your tank) from the substrate. Most stems plants, when trimmed will send out two new stems at the nearest node just below the cut. Now, you will almost have twice as many stems as you had when initially planted. It is important to know that you have just removed most of the plant mass in your tank, thus re-adjust your co2 and fertilizing doses accordingly.

When the trimmed stems have re-grown new tips, let them continue to grow another 4"-5". Once this has been achieved your next trimming will consist of two parts. The first is to make your second trim about 2" above the initial trimming, where you once had one stem, before the initial trimming you should now have two. Trim the two stems and the plant will continue to double the amount of stems. Second is to trim the plant in your desired shape. This is important for refining and to help create depth and flow in your aquascape.

Once this has been done your next trimmings should always be done by following the desired shape that you are trying to achieve. Do not be afraid to trim unwanted stems that seem to grow faster than the rest, even if it means you have to get your arm wet just to trim one or two stems. Remember the best part of your plant will always be the tips, with this in mind, shape your plant to include tips that are very low in order to hide the bare stems of your plant.

The Natural Look

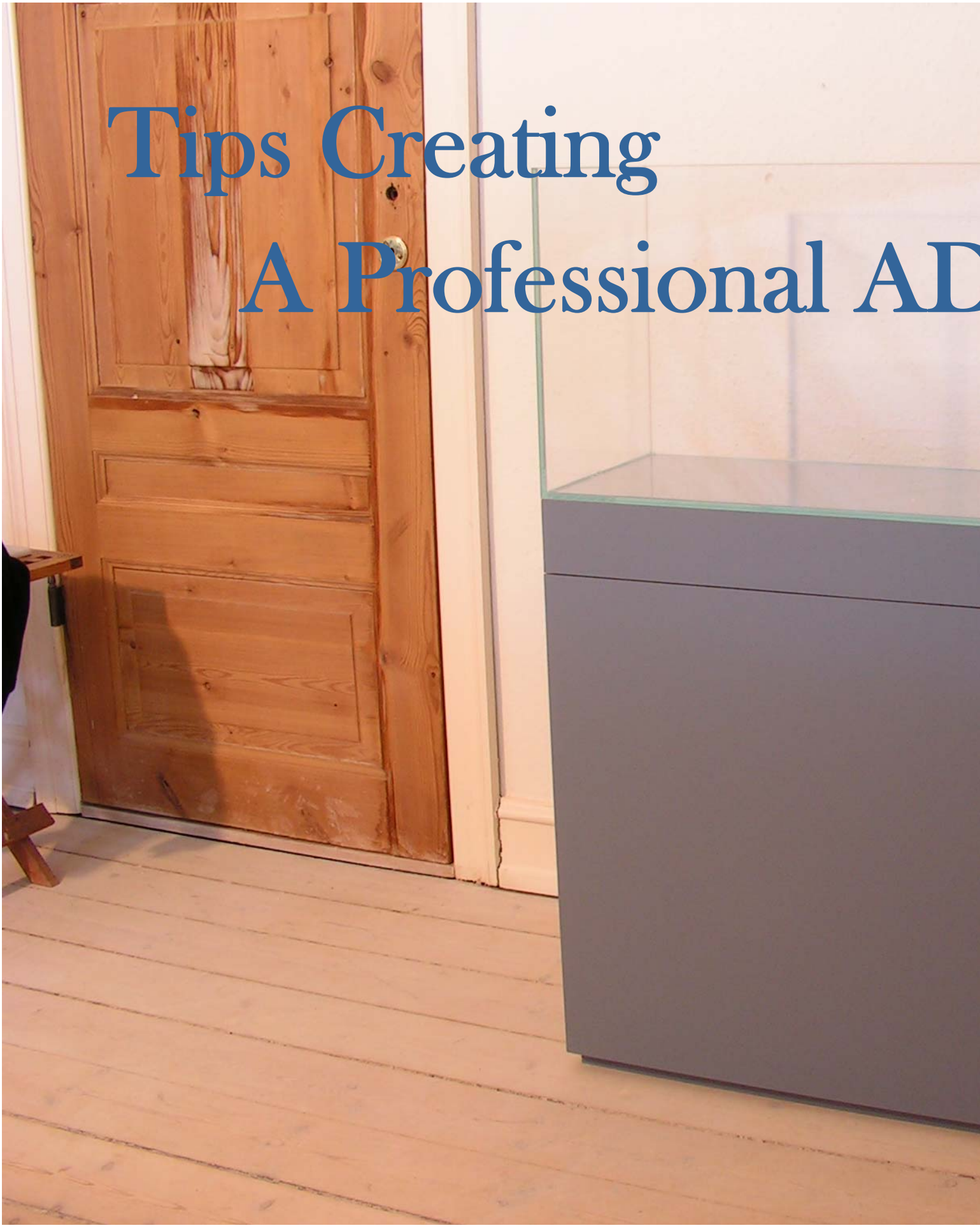
As mentioned above, manicured bushes seem to help create flow in your aquascape but, I prefer the more natural appearance. To achieve this look it requires just as much trimming but seems to be more tedious. Once the first trimming and second trimming process of shaping the plant is complete, from there you will only selectively trim from here on out. Trimming only the faster growing stems slightly below the masses will help maintain the overall shape but, will not create such a manicured look. This technique requires you to monitor your plant growth less frequent than the more manicured look. Although the entire mass of stems will continue to grow, at some point in time you will have to repeat the second trimming method.

Here is a list of a few stem plants that are easily trimmed to achieve the shaped bushy affect.

- Hemianthus micranthemoides
- Rotala sp. 'green'
- Rotala rotundifolia
- Ludwigia arcuata
- Ludwigia brevipes

Note these are mostly smaller leaf type plants.

Tips Creating A Professional AD



DA Stand

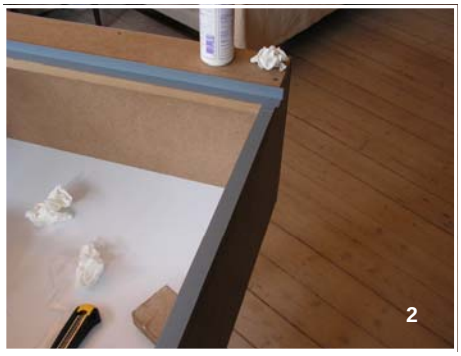
By Kristoffer Willerslev Jørgensen

Just like when building a house or any solid construction you need a good foundation. A aquarium setup is no different. It requires a strong stand to support the tank and to keep all the equipment hidden. When we chose a stand we usually first consider size, cost and then lastly we consider the appearance of our stand. We do not have wide selection of stands to choose from though. It could be due to the high price tag, availability or simply the significant other not wanting us spending the money. So what are we to do?

We must attempt a do-it-yourself project to make our stand resemble what we want our whole setup to look like. Stands which do not match our tanks and light fixtures do not offer a very complete aesthetic feel. As we design the stand, we must try to match it to our tank setup and house décor.

My aquarium setup included a 60x30x36cm rimless OptiWhite tank and aluminum T5 pendent. All kept minimalistic and somewhat anonymous so they do not draw attention away from my aquascape. So if you plan on having the same minimalist style like the one we know from the ADA range of equipment, I hope this article can help you reach your goal.

Remember, a stand is the



1. Stand Assembly
Assemble the pieces of wood with dowels, glue and screws. The inside is covered with plastic foil which saves a lot of work and gives me a good surface for the inside.

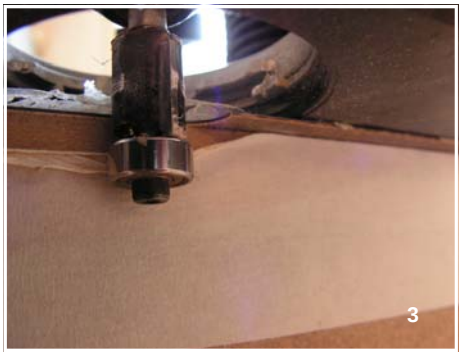
When you assemble the stand, bear in mind how the stand will be stressed by the weight it will hold. You need to select the right type of wood. A stand in this size can be made in 16mm (Medium Density Fiberboard (MDF fiberboard). This wood is very easy to cut and has a lot of strength.

2. Work as the Glue to Dries
When connecting the pieces together, use a water based glue with a short drying time at approximately 1 hour. Not only will this allow you to apply and spread the glue evenly before it begins to dry, it also dries fast enough where you can route the edges soon after.

I recommend save timing by working on different sides of the stand at once. You can route the laminate at one place, while another piece is drying.

3. Use a Router
A router using a bit with a bearing is a necessity for trimming the laminate nicely. It's very fast and easy to use. Cover the area with masking tape to avoid marks and use a firm steady hand. It is essential that you take your time to avoid any mistakes.

4. Detailed Areas
Use a jigsaw and the router with a straight bit to make the detail holes for the hoses. The inside edge can also be covered with laminate to complete the look of your aquarium stand



foundation of the whole setup. The big surface has a tendency to draw attention and can negatively impact your aquascape. Avoid bright colors and strong contrast to the walls and floor. Your aquascape should be the primary focus; not the stand, the tank or any other piece of equipment.

I prefer the minimalistic look and a light grey color that matches the wood and white walls of my apartment.

Using Laminate

I was lucky to find some drawings which were based on the ADA design. I used these as a starting point for my stand. Instead of painting the stand, I then decided to cover it with laminate to avoid the tremendous amount of work it would take to get the large surfaces of the stand painted evenly. I had never worked with laminate and the drawings did not take this into account.

Laminate is hard and has a strong surface with a nice finish. It is found in numerous colors and finishes, and can be chosen to match your taste.

I got in touch with a very nice guy that worked at a laminate workshop. He told me shortly how to work with it and also supplied me with laminate in return for some glassware for CO2.

I cannot stress out how important forums are when you need help with your DIY stand project. Ask before you buy or do anything. Get it all planned and ask around if someone can help you with materials or just good advice. Any DIY project should not end out to be more expensive or giving a result that you are not satisfied with.

I had my father-in-law supply and cut the wood I needed. This made the parts of the stand (wood and laminate) almost free. All I needed was to assemble it, make some holes for wires and hoses, cover it with laminate, trim it and done… Sounds easy? It was!

I highly recommend anyone to try to build their own stand if they have the right tools and can get the materials very cheap. In the end, you may have created something better than anything seen at a store.

Plant.
Root. Fertilize.
Feed. Grow. Thrive.
Monitor. Maintain.
Inspire.
Enjoy.

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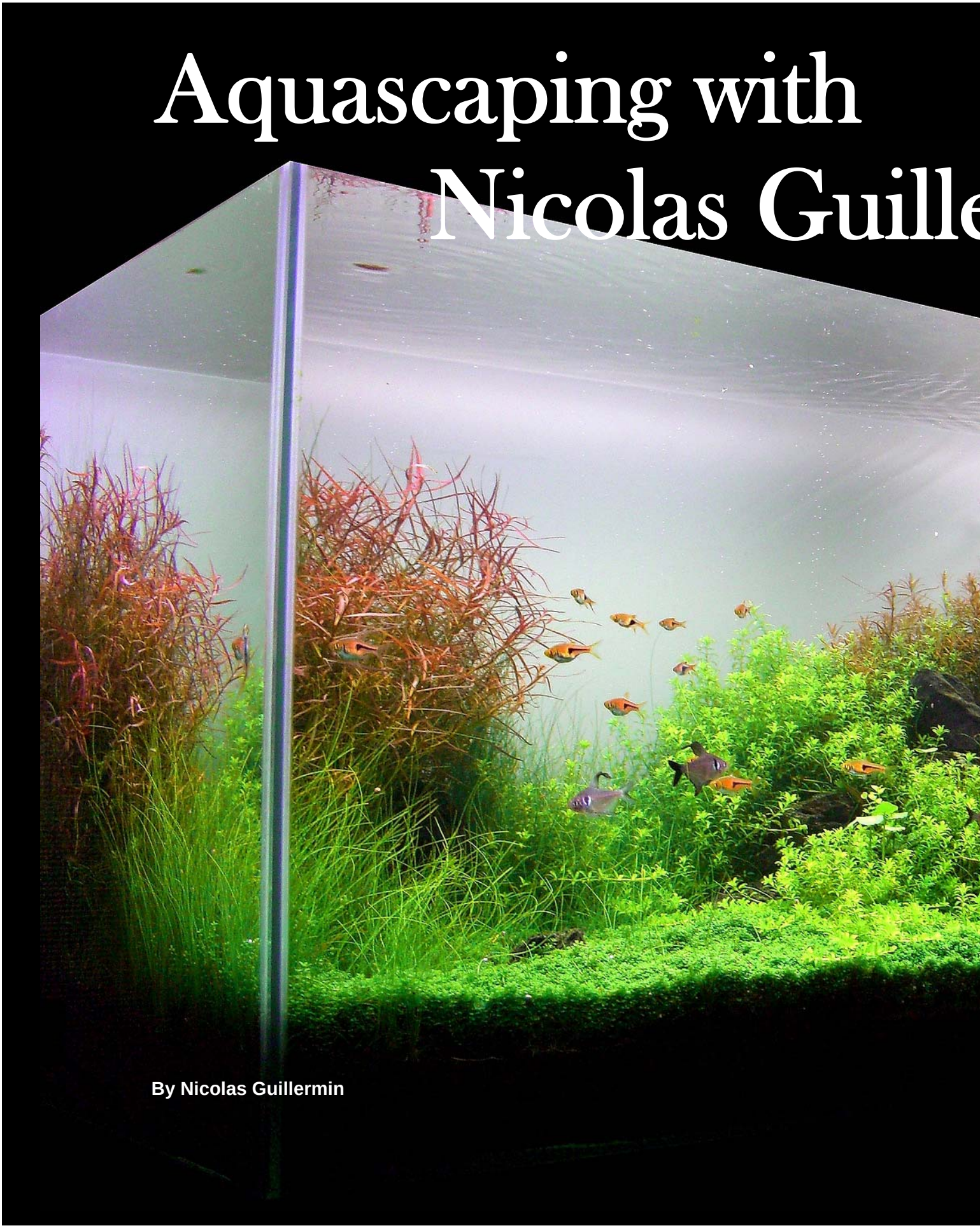
Aquascaping with Nicolas Guille



By Nicolas Guillermin

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Aquascaping from a new perspective

There is a bright future ahead for aquascaping. In the last few years, there has been a huge evolution in planted aquariums. Each year brings in new high quality aquascapes, and we can see more personal styles emerging among aquascapers. People are more attracted to this hobby than ever, and the passion continues to engulf our minds.

I am French but I have been living in Japan for the past 10 years. I am relatively new to aquascaping world. I started doing planted tanks about two years ago after I discover Takashi Amano's aquascapes. I do my best to keep up to a high level and learn more about the different elements of planted aquariums. I will try to do some more original creations in the future, but for now I have learned a great deal from my aquascaping experience.

Aquascaping Inspiration

I think everyone should reach deep into their minds and use their imagination to create their aquascapes. Feel free to do whatever you like. Aquascapes do not have to follow standards or rules. As different as your own vision may be, we must remember aquascaping is an art where one can express freely their own vision of nature.

Nature like this landscape in Japan offers boundless inspiration

You can find a wealth of inspiration on the internet, as well as get advice on your scapes. No one should be ashamed to show their aquascapes even if its the first one you have ever created. You can learn from the people's comments and advice.

Aquascaping Styles

Although I admire biotopes aquariums and 'Dutch Style' aquascapes, I am mostly interested in "nature aquariums" as it is this particularly style that turned me to planted tanks, and aquariums in general. Ever since I moved to Japan, I have been fascinated with traditional Japanese gardens, and since the Nature Aquarium Style (particularly Iwagumi aquascapes) has many roots in Japanese gardening composition I was naturally drawn to this style.

The Nature Aquarium Style contains a certain amount of freedom that allows an aquascaper to build on the basic principles. As a spectator and as a creator these aquascapes leaves a lot of room for imagination. Though there are few rules should not be broken, it seems nearly anything can be created with simple things such as plants, wood, and stones (I particularly love aquascaping with stones).

Even though I try to forget them, some aquascapes I see on the internet impact my imagination a great deal when I try to create a new scape. They unconsciously influence me a lot. I have been trying to create some "classic nature aquarium" scapes and "classic Iwagumi" scapes. I now want to do something more personal, and try to find my own style which should show in my future aquascapes.

I look to get inspiration more from nature nowadays. I am very lucky to live in a beautiful area in Japan, (Kansai district). I often go in the mountains to take pictures, collect rocks, and take in the ambiance of nature. I try to take everything I absorb from my nature excursion and place them into my aquascapes.

Fertilization and Maintenance

I do a quick check everyday of my tanks. Fertilizing usually depends a particular tank and the plant growth. I usually do a 30% weekly water change and

Keep balance in mind when deciding on the combination of plants, rocks and fish.

add fertilizers to compensate the flush of nutrients.

Plant trimming usually also depends on the scape and plant density, style, and plantation. I usually do a big trim every 2 to 3 weeks for the most heavily planted tanks, more rarely for the Iwagumi scapes such as my 240 liter 'In Lucem Sanctam' which has never been trimmed.

I try to keep my aquascapes as simple as possible. The trick is to use a small number of plant varieties in a certain scape. I also use less and less red or orange stem plants as they can be picky growers. I like to play with the "nuances" of green plants which can create beautiful contrasts in a very simple way.

Plant Combinations

I like several varieties of plants, and instead of choosing a favorite plant I like to think of plants that work well in combination like Lilaeopsis + crypts, and glosso+riccia. Combination of plants offer more textures and color contrasts that can make an aquascape more interesting.

Complementary Fish

Fish add to an aquascape in a unique way. I think of them as a way to complement the scape by using their colors, shapes, and specific swimming behaviors. Here again, I tend to use simple fish species that will blend into the landscape rather than stand out as center pieces. I want to give the impression these fish belong naturally in the aquascape.

Overcoming Algae

I am quite lucky and do not have many algae problems. I think it is important to get a well balanced and stable tank to keep algae away. Easier said then done, I know. But I recommend starting slowly with the lights (in intensity and photoperiod).

Watch the plants carefully for any signs of nutrient deficiencies. Algae loves to take advantage of weak and dying plants, so it's important to maintain healthy plants. Once you get to a certain stability, try not to do any drastic changes like altering your CO2, lights and fertilizing routine.

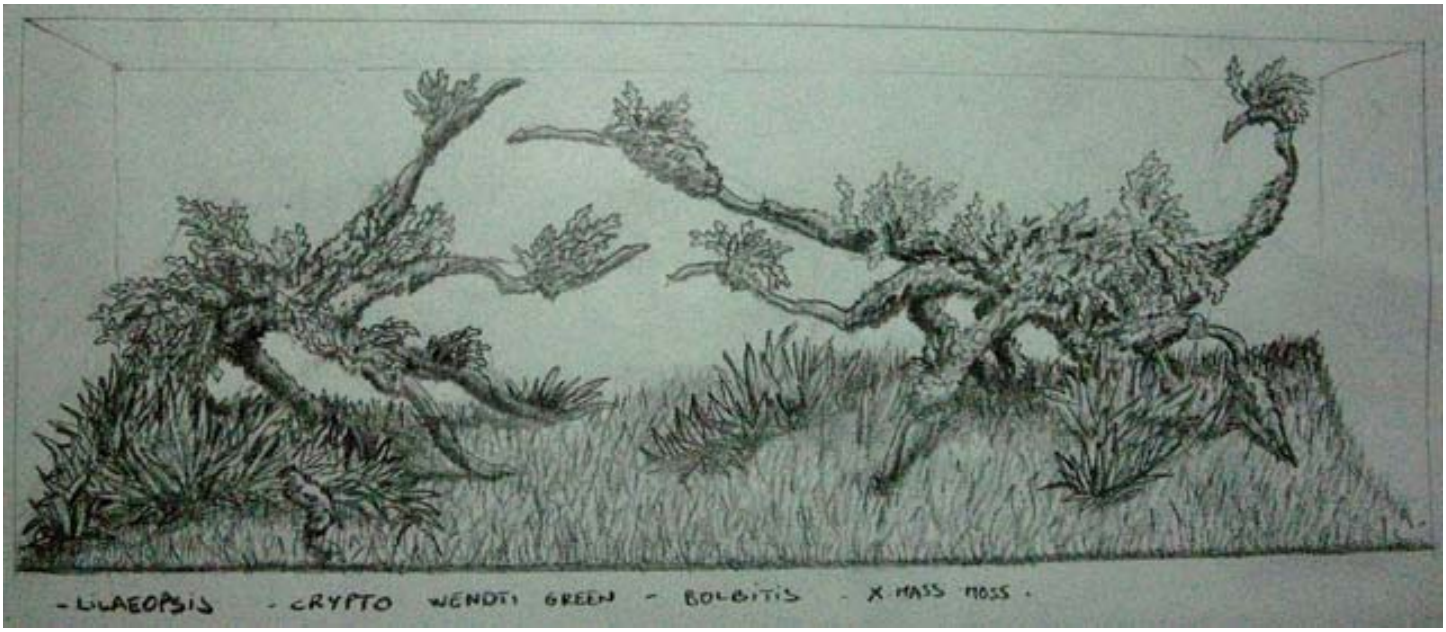
A rigorous maintenance schedule and a good knowledge of your fertilizers and the needs of your plants is the best way to avoid algae.

Sketching Before You Start

Sketching is a great tool to use to build your imagination and creativity. I sketch a lot of nature scenes or imaginary scenes and usually this is how my scapes start .

Sketching gives me a general view of the result I am expecting when I begin to scape. It saves a painted picture of my imagination such as how I expect my hardscape to look with the rocks and wood. It will not show the exact placement of the materials in a scape, but shows how they will associate with either other.

The same goes with sketching plants. I am able to see how the plants will look in general with each other, and



how they can potentially fit into the hardscape. It gives me a clear idea on where should be the most contrasted areas (light/shadow).
The point of sketching is not to have an exact view of the final result of your scape but to have a good lead that allows you to avoid some mistakes and guides you while you start the tank .

Here are some sketches of an idea I was thinking about for my 240 Liters tank. They show a imaginary scene with a few different attempts with background plants and a few landscapes from a place that inspire me a lot recently.

Aquascaping Beauty

My first tank (sonata) was maybe the most original and personal as I was influenced by many different things. The “asian style” that I have just discoved, and not fully explored yet is all around me here in Japan. It is a very exciting experience. The “dutch style” is still popular among the forums I used to visit in France, and has it’s own uniqueness.

All aquascapes are interesting no matter what style you chose. Each of my aquascapes have elements I like about them, and reflects a different moment of my progression as an aquascaper.

Classic Nature Aquarium

Dimensions: 60x30x36 cm
Volume: 60 liters
Light: 2x18 watts ADA NA-Lamps
Photoperiod: 11 hours
Substrate: ADA Aquasoil Amazonia II, Powersand, Bacter 100, clear super, Tourmaline BC, Penac W
Filtration: Eheim 2213
Fertilizer: Step 2, Bright K, ECA, Phyton-Git, Green Gain
CO2: Pressurized, Micropearler 3 bubbles per second

In Lucem Sanctam

Dimensions: 120x45x45 cm
Volume: 240 liters
Light: 8x18 watts ADA NA-Lamps
Photoperiod: 11 hours
Substrate: ADA Aquasoil Amazonia, Powersand, Bacter 100, clear super, Tourmaline BC
Filtration: Eheim 2028, Eheim 1048
Fertilizer: Step 2, Bright K, ECA, Phyton-Git, Green Gain
CO2: Pressurized, Micropearler 3 bubbles per second

Sonata

Dimensions: 120x45x45 cm
Volume: 240 liters
Light: 8x18 watts ADA NA-Lamps
Photoperiod: 11 hours
Substrate: ADA Aquasoil Amazonia, Powersand, Bacter 100, clear super, Tourmaline BC
Filtration: Eheim 2028, Eheim 1048
Fertilizer: Step 2, Bright K, ECA, Phyton-Git, Green Gain
CO2: Pressurized, Micropearler 3 bubbles per second

Classic Iwagumi

Dimensions: 60x30x36 cm
Volume: 60 liters
Light: 2x18 watts ADA NA-Lamps
Photoperiod: 11 hours
Substrate: ADA Aquasoil Amazonia II, Powersand, Bacter 100, clear super, Tourmaline BC, Penac W
Filtration: Eheim 2213
Fertilizer: Step 2, Bright K, ECA, Phyton-Git, Green Gain
CO2: Pressurized, Micropearler 3 bubbles per second

Kamikakushi

Dimensions: 30x30x40 cm
Volume: 36 liters
Light: 13 watts 8000k
Photoperiod: 11 hours
Substrate: ADA Aquasoil Amazonia
Filtration: Eheim 2232
Fertilizer: none
CO2: none

Diana Walstad's El
verses
Tom Barr's Low Tec

By Aziz Dhanani

Natural

ch Setup

A hobbyist shares his experiences
rying both methods

This article reflects my efforts to set up a 5 gallon hex low light, low tech, low maintenance, and non c02 injected tank. I will experiment and share my experiences with these three different methods:

- High light with DIY CO2 and Seachem Fluorite
- Diana Walstad's El Natural Aquarium setups using potting soil
- Tom Barr's low tech, non CO2 setups

High light with DIY CO2 and Seachem Fluorite Setup

I first attempted to make this hex tank a high light (30 watts) tank with DIY c02 injection and Seachem Fluorite (regular) substrate. This was met with failure, I believe largely due to overheating issues.

The water turned a never ending brown color, the plants pretty much decayed, and all the fauna in the aquarium (African Dwarf Frog, Cherry Shrimp, and Otocinclus perished. No amount of water changes resolved the issue.

I tore the tank down and started a new setup as a 5 gallon Natural Planted Tank (NPT) as per Diana Walstad's El Natural Method which recommends using top soil capped with pea gravel. When I created this NPT, I also set up a 5 gallon rectangular tank as per Tom Barr's low light, non C02 method. Both tanks were set up on November 7 2007

and the differences that I observed between these two tanks as the months passed were remarkable.

El Natural Planted Tank

First, let's talk about the NPT hex tank. The plants did not die or grow much within the first 2-3 months. However after this time period, I saw a rapid deterioration of plant growth, and fish and shrimp deaths like I had never seen. I tried to prevent the fish and plant deaths by increasing the frequency of water changes, removing decaying plant matter, adding new plants, using carbon in the filter, and reducing feeding but nothing seemed to work. Ammonia and nitrite levels tested zero.

Tom Barr's Low Tech Method

Things progressed quite differently in my Tom Barr 5 gallon low tech tank. The 2 Amano Shrimp tripled in size, while the Otocinclus and Dwarf Aquatic Frog appeared to be healthy and active. The plants show new growth each day. Left with a 5 gallon hex tank in which nothing would survive, including plants I had little choice but to dismantle the tank. This left me with 2 options. (1) to sell the tank, or (2) to redo the tank. As I had space in my home,

I chose to redo the tank using Tom Barr's Method as I had the most success with the method. For the record, I would like to state that I have the utmost respect for Diana Walstad and I am just sharing my experience with her method. I am not in anyway suggesting that people should avoid the method. Many people who have set up natural planted tank methods have had a lot of success and Diana's book, "Ecology Of The Planted Aquarium," has had rave reviews.

The Setup with the Tom Barr Low Tech Method

With a method chosen, I have redone my 5 gallon Marineland Hexagon tank and setup it up on March 4, 2008 following Tom Barr's low tech recommendations.

Filter

The filter was a simply Biowheel filtration system with Polyfloss over a pantyhose containing a tablespoon of Seachem Purigen (to be replaced monthly) as the media.

Substrate

I cheated here a little bit by adding a thin layer of Schultz Aquatic soil and overlaying that with a thin layer of leonardite, peat moss, and crushed Seachem fertilizer tab pieces. I capped this with about 1 ½ " of Seachem Onyx sand and capped the Seachem Onyx Sand with a thin 1/4" of pool filter sand. I planned to keep some Peppered Cory catfish and I felt that they would enjoy the layer of pool filter sand because it would be softer on their sensitive barbells.

I used Seachem Fertilizer Tablet pieces to further enrich the substrate. The reason for using a thin layer of Schultz Aquatic soil was to see if it would help with faster bacterial colonization of the substrate in much the same way that a layer of power sand under ADA Aqua Soil is supposed to do.

Lighting and Photo period

The tank was initially setup using a screw in 6400 K 14 watt compact fluorescent bulb with 8 hour straight photoperiod. With the appearance of diatom algae one month after the tank was set up, I decided to change the light bulb to a screw in 6500K 15 watt compact fluorescent tube.

I also switched to a split photoperiod with the lights coming on at 10:30 A.M to 3:30 P.M., off from 3:30 P.M. To 5:30 P.M, and on again from 5:30 P.M. To 9:30 P.M (total 9 hours of lighting). I switched to the split photoperiod as I had the most success with this.

Fertilizer Dosing

I used limited amounts of fertilizers, and dosed about once per week. A pinch of nitrates, phosphates, potassium, Seachem Equilibrium plus a ½ teaspoon of Yamato Green trace element supplement with weekly 50% water changes. I also dosed the tank with 50 CC's of Seachem Flourish Excel to provide the plants a carbon source.

Plants

The Plant Species I used were: Asian Ambulia (Limnophila sessiliflora), Onion Plant (crinumthaianum, 2 dwarf lily bulbs(Nymphaea zenkeri) fully sprouted, Red Cryptocorne Wendtii, Java Fern, Dwarf sag (Sagittaria subulata), and Anubias nana. I chose these plants as they were the ones that I had previously had the most success with.

Inhabitants

A zebra danio was added to the tank when it was setup to cycle the tank. After approximately 3 weeks when ammonia and nitrite levels tested zero and the tank appeared cycled, an Otocinclus was added to help resolve a diatom algae problem. A week after that, two cherry shrimp were added. I

wanted to add Amano Shrimp as I found them to be hardier than cherry shrimp, but I was unable to find a local supplier of Amano Shrimp, so I opted to add the cherry shrimp instead.

My Results

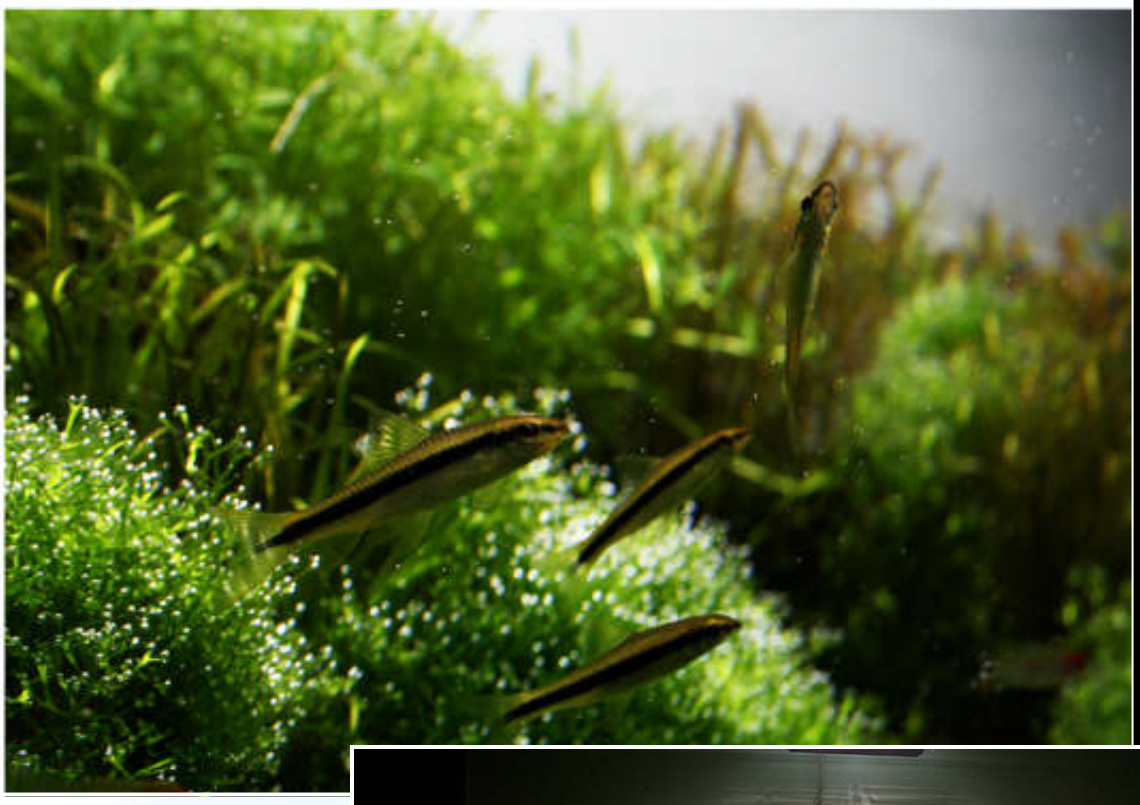
Diatom algae materialized 3 weeks after the tank was setup. Fortunately, the Otocinclus that was added to the tank at that time made short work of the algae. To date, the onion plant is growing really well. It is shooting off roots above the surface as I did not plant it deep enough when I set up the tank. The dwarf lilies were shooting out new leaves almost weekly and I was forced to trim the leaves to prevent them from blocking out light. This is why the leaves are not visible in the picture. The bulbs are hidden in the background and out of sight. Hopefully as new smaller leaves shoot out that don't need to be trimmed, they will become more visible.

The Asian amublia had also grown considerably but some stems were still showing residual diatom algae on rosette tips, and the diatom algae was giving the rosette tips a yellowish to brownish tinge. The dwarf sag completely melted, which was somewhat surprising considering that it is flourishing in the rectangular 5 gallon Tom Barr type low tech tank.

Also surprising was the growth of the Anubias nana. While it was not dieing the tips or the plant leaves were browning. How this tank progresses overtime is anyone's guess.

Below is a picture of what the tank looks like. This was the best picture that I could take and I apologize to readers ahead of time for my poor camera and picture taking skills. As far as the aquascape of aesthetics of the tank, the scape's appearance took a backseat to the primary goal of setting up a tank that would support and promote healthy fish/shrimp and plants, so I make no apologies for that.

Aquascape In F



Focus

An Interview with Andre Cardoso

This month we interviewed up and coming aquascaper Andre Cardoso.. Despite being a young aquascaper, Cardoso has an amazing ability to capture the beauty of nature in his glass boxes. His aquascape "Pasodoble" illustrates his attention to detail and fine trimming techniques.

Q: Tell us about yourself. How did you get into planted aquariums?

A: My name is André Cardoso, I'm 17 years old and I live in Lisbon, Portugal. I always loved Nature and the world that surrounds us, I love sports and photography. My favorite hobbies are football, surfing and of course, aquariums. Since I was young, I remember my father having an aquarium, I guess he was the one who taught me this passion.

I started about an year ago, with only one aquarium, with 20 liters it was simple but sweet. Then I got another one and another and things got a little bit more serious.

Q: Tell us more about your feature aquascape. Where did the inspiration come from?

A: The inspiration for my aquascape came from looking at an aquascape from the ADA 2007 Aquascaping Contest. I loved the colors, the shape and the fact that it was like a piece of nature captured and placed in the aquarium. Everything seem to fitted perfectly. I decided I had to try one of my own.

Five months ago, I started doing what we here, in Portugal, call "experiencias com o layout" which stands for layout experiments. I got some local rocks and rearranged them until I got something I was fond of. It took about 4 months to look just how it looks now. I have to say I did not encounter a major algae problem like I was expecting because my tank was a "high tech" layout. I think water change and C02 additions were my big helpers this time.

Q: What's uniquely different about this layout from previous one's you've done? What does the title, Pasodoble, mean for this scape?

A: With this aquarium I started to use HQI illumination. That was why this aquarium was so special to me. I had never used it before, but have to say I am extremely pleased with the results.

The title of the aquarium was inspired by Spanish music called "Pasodoble". It is famous in bullfights and since here, in Portugal, we bullfights are a tradition. I thought it would be nice to name my newest creation "Pasodoble".

Q: With so many stem plants, it must take a lot of regular maintenance to keep it looking in top shape. How do you do it?

A: I have to confess this aquarium requires a lot of time and patience. That is the primary reason why I am about to disassemble it and start a new layout. I have to fertilize every single day, not only with K and P but also with micro nutrients (specially iron). C02 is injected 24/7, a 6 Kg bottle with a glass type diffuser. Water changes are always performed in Sunday but I also have to replace some water that evaporates during the week due to the warm temperatures in Portugal.

Trimmings are frequent too; Rotalas grow very quickly as well as riccia, so, I have to trim almost every week. It takes a great deal of time to maintain an aquascape. Something most people forget or don't know about initially.

Q: You said earlier that you didn't have many algae issues despite the high lighting used in the layout.

An ADA 2007 Aquascape seen to the right inspired Andre Cardoso's Pasodoble aquascape.

Hardscape arrangement for Pasodoble on a substrate bed of Akadama Special.

Initial planting stages of stem plants in the background, and Riccia around the rocks. HC foreground is planted in thin patches to allow even growth as it spreads across the substrate.

How did you manage that?

A: Fortunately I did not experienced any major algae problem. Some BBA appeared but were quickly gone (about 2 weeks). I think it all has to do with water changing and fertilization. As soon as you understand your aquarium, what it needs, and when it needs it, you are almost half way to a successfully algae-free aquarium.

The other "ingredient" is patience. Sometimes it is the best method to solving an algae problem. You have to let the aquarium find its balance, and it will find it much more quicker if you do not do any drastic changes. We must remember an aquarium is never 100% free of algae. In fact, some algae can tell that you have a healthy fish tank.

Q: One of the hardest things to chose for a layout are the plants and fish species. Why did you chose the selection that you did?

A: The plants will depend on your taste. I prefer plants with small leaves, but I like plants like *Anubias* and *microsorium* as well. It is a matter of what suits the scape and what does not. It is important to planning the layout before you start. Look at different aquascapes and decide which plant combinations look good and go from there.

In a second phase (not less important) you will choose the fish; the fish will complete your aquarium. I prefer small fish that travel in group. For this aquarium I chose Rasbora and some ottos to help with the cleaning. The fish's color is also important because it will complete the layout by adding a flash of color.

Within a month, the plants have filled in the aquascape and formed gracefully around the rocks.

Q: Describe your aquascaping technique.

A: The hardscape arrangement will depend on what material you have available. Wood and rocks will have a different approach then an all-plant layout. Trimmings will also depend on what kind of layout you are trying to reach. What kind of image or picture do you want your aquarium to "have". I often play with trimmings so I can reach a scape I like.

Q: After creating an aquascape, when do you decide to take it down?

A: An aquascape reaches its climax when all plants and fish are as one. Much like in a landscape where everything is where it is meant to. Sometimes too, I can get tired and think that the layout has nothing more to give, and do not want to spend as much time as I had previously done. That is when you know it is time to take it down.

Q: Many newcomers to the hobby have a hard time aquascaping. How easy is it to aquascape?

A: Aquascaping isn't as hard as it seems. I remember, when I first started, I looked into "expert" aquascapers' aquariums and thought to myself "I will someday have something like that". I have still much to learn but what I know now is all thanks to the help I got from people with more experience than me.

Aquascaping isn't something you are born with. This artistic skill is something you achieve only with experience and time. I would say that the biggest challenge for any aquarium lover would be time and money spent getting and maintaining a planted aquarium.

Q: Where do you see the aquascaping hobby going in the next 10 years?

A: Aquascaping will certainly continue to rise, new methods and ideas of what an aquarium should look like will continue to come. I think, at least I hope so, new and better ways to maintain an aquarium will appear. The planted aquarium era has just begun.

Pasodoble

Dimensions: 800x400x400 mm
Volume: 128 liters
Light: 1xHQI 150 watts 6500 Kelvins
Photoperiod: 10 hours
Substrate: JBL Aquabasis,
Micro-granulated Micro Elements,
Akadama Special 30 Liters
Filtration: Fluval 203 with 11 watt UV filter
Fertilizer: Step 2, Bright K, ECA, Phyton-Git, Green Gain
CO2: Pressurized, glass diffuser at 1 bubbles per second

Flora
Hemianthus callitrichoides "Cuba"
Rotala sp "green"
Rotala rotundifolia
Hemianthus micranthemoides
Anubia nana "petite"
Rotalla walichi
Riccia Fluitans

Fauna
10-Rhodostomus
Caridina japonica
Red Cherry Shrimp

Dissolved Organic Compounds Explained

By Cecil Griffith

If you're like most planted aquarium owners, you want a healthy algae free aquarium. You dose fertilizers regularly and make sure you don't over do the lighting, but you still manage to have some problems when it comes to fish and plant health. Understanding dissolved organic compounds and how they effect your planted aquarium will help you sustain a enriching environment for your aquatic plants and fish.

What is a dissolved organic compound?

An organic compound is any compound that contains one or more atoms of carbon. Natural waters, freshwater aquariums and saltwater aquariums contain a great variety of soluble organic compounds. These include such compounds as sugars, fatty acids, humic acids, tannins, vitamins, amino acids, proteins and urea. Suspended organic matter in water includes remains of organisms in various stages of decay and living phytoplankton, zooplankton, fungi and bacteria. Sometimes each of the concentrations of individual organic compounds is not measured. Instead it is more common to measure total particulate organic matter, biochemical oxygen demand, or chemical oxygen demand. These variables are indicative of the total quantity of organic matter in water.

So where do they come from?

The major source of dissolved organics in aquaria is the natural biological processes that accompany having a tank full of fish that are fed often. Fish feed, fish wastes and other particulate organic material are colonized by bacteria which break the material down into dissolved substances. The basic step is for particulate carbon to become dissolved carbon. More fish and more fish feed means a higher concentration of organic substances.

How to control excess dissolved organic compounds?

There are many ways to control the amount of organic carbon in your system. Remember, there are two general types of organic material: particulate and dissolved. There are ways to remove both from your aquarium.

First, limit the amount of particulate carbon in your aquarium. This does not mean reducing the number of fish in the tank or reducing the feeding amount (but these would surely help). It means cleaning the mechanical filter component of your filtration systems often.

The filter pad is where a majority of the particulate material will get trapped. If your system is heavily stocked you might have to clean this every couple of days but the reward will be worth it. Organic material trapped on the filter pad is of no benefit to the aquarium environment - remove it often. Some people use charcoal in their filters to help remove some of this material.

Next, if your aquarium has a substrate; clean it regularly with a siphon action gravel washer. The gravel at the bottom of an aquarium is a good place for particulate organic material to collect - so getting rid of this material will help.

Getting rid of the organic material on a regular basis will go a long way towards keeping an aquarium healthy and keeping disease away. So how often is a regular basis?

That has to be decided on an aquarium by aquarium basis. If you have a lot of fish and feed a lot you'll have to clean the mechanical filter and substrate more often than a person with a few fish who feed sparingly. The major way to get rid of dissolved organic carbon is water changes. This is a simple method but most people are a little lazy about this.

The people with saltwater tanks are very concerned about dissolved organics. They use protein skimmers, meters and control devices for ORP, ozone, and other things specifically made to control the compounds.

People with freshwater planted aquariums have the added benefit that plants are able to help with this by using some of these organics. By doing 50% water changes, cleaning filters regularly, correct fertilization, not overfeeding, and doing all the necessary maintenance involved helps to promote a healthy aquarium.

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