To know Mother Nature is to love her smallest creations. We recreate the natural eco-system in our aquarium, which leads to a better understanding of the global environment.
Feeling nature in everyday life

Beautiful underwater scenery where fish and aquatic plants create a harmony. Nature Aquarium is a recreation of an ecosystem structure where plants and organisms relate to each other and coexist in an aquarium tank by learning its methods from nature. Aquascape created by arranging stones, driftwood and aquatic plants becomes one ‘Small Ecosystem’, and it leads us to a rich time that makes you think of nature. Welcome to the world of Nature Aquarium.
In this section, the standard aquarium tank size of Nature Aquarium, W60cm is the focus, and the process from the aquarium tank installation to layout completion will be introduced.

1. Install an aquarium tank

2. Spread substrate

3. Make a Composition

4. Plant aquatic plants

5. Attach epiphytes

6. Aquascape completed
1 Install an aquarium tank

In order to enjoy aquascapes for a long time, safety is essential. Installing an aquarium tank in the right way is the first step in Nature Aquarium.

Standard W60cm aquarium tank
The size of classic W60×D30×H36(cm) aquarium tank is very popular because there is a wide variety of its related equipment available too. The aquarium tank size is great for those who will start creating layouts in earnest, as well as for experts who want to face one’s sensibility and techniques in the limited aquarium tank size.
To grow aquatic plants in healthy conditions setting up substrate is important. The beauty of aguascape is supported by the substrate foundation.

Roles of substrate
Substrate that helps aquatic plants take root easily, and that isn’t likely to compact for a long period of time, is desired for Nature Aquarium. Substrate not only supplies nutrients to aquatic plants, but also becomes a foundation to prepare an environment in an aquarium tank while playing a role of a living place for invisible microorganisms.

Spread substrate

   Power Sand consists of rich nutrients, and prevents substrate from compacting during a long term maintenance. Put the Power Sand into the aquarium tank directly from a bag, and flatten the whole Power Sand to make it flat.
   If a space of 1cm is left in the front, the finished look will be beautiful.

2. Sprinkle substrate additives
   In order to maintain a healthy environment in an aquarium tank, add substrate additives. Add 3 spoons of each Bacter 100 and Clear Super (a spoon comes with the product), and add 10 spoons of Tourmaline BC as recommended dosages.

3. Add Amazonia Supplement
   Amazonia Supplement that comes with Amazonia Ver.2 has a function of enhancing nutrients. A bag of Amazonia Supplement (50mL) for 9L of Amazonia Ver.2 is the guideline for addition.

4. Spread Aqua Soil - Amazonia Ver. 2
   Amazonia Ver.2 is made from black soil effective for the growth of aquatic plants, and the water condition becomes more suitable for aquatic plants and fish with the function of the natural soil.
3 Make a Composition

Making a composition with driftwood and stones might be the best part when creating a layout. Develop your imagination by getting inspirations from natural scenery, and create a firm and stable composition.

The basic compositions of Nature Aquarium
Variations of Nature Aquarium can be limitless depending on the combinations of substrate, layout materials, and aquatic plants. If you are conscious of the basic concave, convex, and triangle compositions when arranging layout materials, it becomes easier for you to create a layout, and the layout composition becomes more beautiful and stable.

Three basic compositions of Nature Aquarium

- **Foreground**: Choose aquatic plants while thinking about impressions of aquatic plants and their heights.
- **Midground**: It plays a role to give a continuous flow between the foreground and background.
- **Background**: The whole impression is determined with the balance of shapes and colors of leaves.

**PROCESS**

1. **Wind moss around driftwood**
   - Firmly attach a thin layer of moss to the surface of driftwood with Moss Cotton. Moss Cotton will melt away by the time when the moss attaches.

2. **Make a composition with stones and driftwood**
   - A point when making a composition is a balance between the sizes of materials and their placement. Choose the right layout material size for the aquarium tank, and place them while thinking about the whole balance.
   - While keeping a concave composition in mind, place stones on both sides.
   - Place pieces of driftwood on top of stones while keeping a good balance.
   - Arrange them while paying attention to their directions and angles.

**Envision how and where to plant aquatic plants**

When creating a composition, think about where to plant aquatic plants beforehand. Have a concrete idea of aquatic plants you are going to use while being conscious of all zones, such as foreground, midground, and background, starting from the front.

**Top**

**Background**
- The whole impression is determined with the balance of shapes and colors of leaves.

**Foreground**
- Choose aquatic plants while thinking about impressions of aquatic plants and their heights.

**Midground**
- It plays a role to give a continuous flow between the foreground and background.
4 Plant aquatic plants

Choose aquatic plants in accordance with an aquascape you envision. Plant aquatic plants carefully with tweezers for aquatic plants.

Roles of aquatic plants
Nature Aquarium is made up of various interrelationships. Aquatic plants perform photosynthesis and release oxygen in the water, and living creatures use the oxygen to breathe. Aquatic plants can be living places for fish as well as playing a role to purify the water.
5 Attach epiphytes

Epiphytic aquatic plants are reassuring because they come in handy in difficult parts in a layout and the midground. Let’s improve the whole aquascape look by effectively arranging epiphytic aquatic plants.

Species of epiphytic aquatic plants

Epiphytic aquatic plants represented by ferns and mosses are essential to enhance the natural feeling in aquascapes. Epiphytic aquatic plants firmly take root in places where they are fixed. Although they grow slowly, they can be enjoyed for a long time, and the passage of time is expressed.

PROCESS

1. Arrange epiphytic aquatic plants.

Hygrophila pinnatifida and Bolbitis should be used by having them take root on stones and driftwood. Think about hiding the base of stem plants and the continuity between the foreground and background, and plant them with a good balance.

Fix them with Wood Tight.

2. Pour water while putting a weight on the driftwood.

After planting, put a weight on the driftwood to avoid the driftwood from floating, and then pour water. Adjust tap water to 23~25℃, remove residual chlorine with Aqua Conditioner - Chlor-Off, and then pour water slowly.

When arranging epiphytic aquatic plants, up and down, front and back, left and right and all spaces should be taken into account, and pay attention not to arrange them too evenly or too monotonously. Having a good balance and rhythm is important.
It is the completed aquascape 3 months after planting. In a well-balanced aquascape, the water shines purely and healthy aquatic plants thrive. In order to create such a beautiful aquascape, properly setup special equipment for growing aquatic plants, and daily maintenance should be done while observing the aquascape conditions.
Related Equipment

After planting, install lighting, filter and CO₂ injection equipment. Make sure to properly setup special equipment for Nature Aquarium.

1. Filtration System
   - Super Jet Filter combines a solid body made of stainless steel and high filtration capacity. It also comes with glass pipes.
   - Super Jet Filter ES-600

2. CO₂ System
   - When fine CO₂ air bubbles are diffused from Pollen Glass into water, CO₂ is effectively supplied into water.
   - CO₂ Advanced System-Forest

3. Lighting System
   - Lighting equipment that uses RGB LED chip is developed specially for growing aquatic plants, and realizes ADA’s unique light. And it helps aquatic plants grow in a healthy condition, and brilliantly illuminates aquascapes.
   - Aquasky RGB 60
Filtration system that makes water in an aquarium tank circulate and purifies the water, might be the heart of Nature Aquarium. With the function of microorganisms, active water circulation can be created.

Water purification by biological filtration
The water in an aquarium tank gets dirty with organic matter and ammonium that are dissolved from substrate, or excreted from living creatures. Eliminating and breaking down the cause of water contamination, and purifying the water are the filter’s roles. And filtration by microorganisms settled on the filter media is called biological filtration.

1. Set the filter media
Set Bio Rio G in a filter unit. When yellowing of water occurs, change water or add NA Carbon (sold separately) to the filter media.

2. Connect a hose to Lily Pipe.
For the hose to be connected to a filter and Lily Pipe, give an extra length than the exact length.

3. Decide the position of pipes in consideration of the water flow.
Water flow occurs in an aquarium tank due to the outflow water from Lily Pipe. The water flow should be taken into consideration depending on the layouts, and both outflow and inflow pipes should be placed accordingly.

4. Aeration at night
In the span of time when there is no light, aquatic plants need oxygen like fish. After turning the light off, raise the outflow opening of Lily Pipe from the water surface, and perform aeration.
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2 CO₂ System

In the span of time when the light is on, supply CO₂, and promote photosynthesis of aquatic plants. Properly install special equipment, and perform appropriate CO₂ injection.

**Necessity for photosynthesis of aquatic plants and CO₂**

Plants perform photosynthesis after being exposed to light and grow. Aquatic plants perform photosynthesis in the water too. They take CO₂ and create oxygen. With the oxygen, living creatures such as fish, invertebrates, and microorganisms breathe, and a good relationship will be established for each other.

<table>
<thead>
<tr>
<th>Equipment Set-up</th>
<th>CO₂ System</th>
<th>Aquascape Maintenance</th>
<th>A Collection of Aquascape Examples</th>
</tr>
</thead>
</table>

- CO₂ System 74 / Ver. 2
- CO₂ Advanced System-Forest
- CO₂ Bottle
- Pollen Glass EZ
- Check Valve
- Ball Valve
- CO₂ Metal Stand
- Pressure-Resistant Tube (Clear type)
- Silicone Tube
- Suction Cups
- Pipette for cleaning

Adjustment of the CO₂ amount can be done with the Fine adjustment screw on CO₂ Regulator. At first, adjust it to make bubbles come out at a rate of 1 bubble per second, and increase the amount of CO₂ depending on the growth of aquatic plants.

1. **Installation of CO₂ Advanced System**
   - If using CO₂ Advanced System - Forest that consists of all the equipment and parts you need for CO₂ injection, CO₂ injection can be easily started.
   - Connection point
   - Silicon Tube (Don’t make it too long)
   - CO₂ Regulator
   - Ball Valve
   - Pressure-Resistant Tube or Joint Stick (Optional)
   - Clear Stand (optional)
   - Pollen Glass EZ
   - Check Valve
   - Connection direction of Check Valve
   - Pressure-Resistant Tube (Length depending on the installation location)

2. **Adjust the CO₂ amount**
   - CO₂ Advanced System-Forest
   - CO₂ Forest Bottle
   - Pollen Glass EZ
   - Check Valve
   - Ball Valve
   - CO₂ Metal Stand
   - Pressure-Resistant Tube (Clear type)
   - Silicone Tube
   - Suction Cups
   - Pipette for cleaning
   - Clear Stand for CO₂ System 74
   - It can be installed on the side of an aquarium with Clear Stand (sold separately).
   - Count how many CO₂ bubbles are released.
   - Prepare for injection.
   - Adjust the injection amount with the Fine adjustment setting screw, and fix it with the Fine adjustment setting screw.
   - Count how many bubbles are released inside the counter of Pollen Glass EZ.

- What’s included in the set
- CO₂ System 74-YA/Ver. 2
- CO₂ Advanced System-Forest
- CO₂ Forest Bottle
- Pollen Glass EZ
- Check Valve
- Ball Valve
- CO₂ Metal Stand
- Pressure-Resistant Tube (Clear type)
- Silicone Tube
- Suction Cups
- Pipette for cleaning
- CO₂ Advanced System-Forest
3 Lighting System

Through many years of research and practice, lighting equipment for Nature Aquarium where aquatic plants thrive beautifully, boasts basic performance for growing healthy aquatic plants and high color rendering.

Necessity for Light

Light is indispensable for photosynthesis that aquatic plants perform. For aquarium tanks, lighting systems play a role of the Sun in nature, and by recreating daylight hours with lighting, a stable living rhythm for aquatic plants and fish can be created.

High color RGB LED for growing aquatic plants

Aquasky RGB and Solar RGB with RGB LED lights specializing in growing aquatic plants, achieve the wavelength of light distribution optimal for enjoying aquatic plants as well as growing them.

- Light emitting surface should be installed in the center of the water surface.
- NA Control Timer II is useful because CO2 On/Off can be also linked.
- Turn on the light every day for about 8 hours. NA Control Timer II is useful because CO2 On/Off can be also linked.

Aquasky RGB 60

- RGB wavelength chart
- Illuminate your aquascape in brilliant colors.
- RGB LED × 70
- Color temperature : Around 9,000~12,000K

Features

- It can be installed just by placing on top of an aquarium tank.
- It is equipped with the soft-start function that is gentle for living creatures.
- The light amount is optimal for a W60cm aquarium tank.
- Low power consumption and excellent running-cost

Solar RGB

- RGB wavelength chart
- RGB LED × 160
- Color temperature : Around 9,000~12,000K

Features

- It is a hanging type and supports open-style aquarium.
- It feels open above the aquarium tank, and makes it easier to do maintenance tasks.
- It can be adjusted with wires, and the light amount can be easily controlled.
- The specification sufficiently supports a W90cm aquarium tank.
This maintenance schedule is created based on the maintenance for the finished aquascape featured earlier in this guide. Make sure to understand the entire maintenance tasks, and perform daily maintenance according to the changes of aquascapes.

- **Immediately after planting**
  - Water-quality measurement
  - Equipment maintenance
  - Adding liquid fertilizers

- **1 WEEK**
  - CO₂ Supply

- **2 WEEKS**
  - Adding liquid fertilizers

- **3 WEEKS**
  - Introduction of organisms to aquarium for algae removal
  - Adding Green Brighty Neutral K / Mineral A

- **4 WEEKS**
  - Cutting aquatic plants

- **5 WEEKS**
  - Introduction of fish to aquarium
  - Trimming aquatic plants

- **6 WEEKS**
  - Water quality measurement
  - Adding Green Brighty Neutral K / Mineral B

- **7 WEEKS**
  - Equipment maintenance

- **8 WEEKS**
  - CO₂ Supply

- **9 WEEKS**
  - Adding liquid fertilizers

- **10 WEEKS**
  - Reducing supply amount at the timing of trimming

- **11 WEEKS**
  - Peak growth period of aquatic plants (after 3 to 4 months)

- **12 WEEKS**
  - Increasing the addition amount depending on the peak growth period

- **Additional Maintenance Schedule**
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※The maintenance methods will change depending on the aquascapes.

*The maintenance methods will change depending on the aquascapes.*
Water quality measurements are clues to know the condition of aquarium. Make sure to seize the measurement items at the initial stage of aquarium setup, and grasp the environment of the aquarium tank and filtration condition.

1. Condition check by observing an aquarium tank

Observe your aquarium tank while paying attention to the check items. An aquarium tank with Aqua Soil - Amazonia Ver.2 tends to have the characteristic of causing less water turbidity than the existing substrate system.

Check items
- Water transparency
- Aquatic plant condition
- Algae outbreak

2. Measuring a basic pH level of water quality

pH which is the basis of water quality, is a measure of acidity and alkalinity of water (pH=7.0 is neutral). Many aquatic plants prefer slightly acidic water quality with low pH (around pH=6.0).

Identify the pH level comparing with the pH Color Chart.

3. Measuring water contamination, an ammonium level (NH₄)

To grasp the water contamination level, measure ammonium (NH₄). Although ammonium can be detected in high concentration at the initial setup stage, it decreases when biological filtration starts to function.

Water change

The water in an aquarium tank gets dirty little by little due to various factors. Regular water change helps maintain the water quality and transparency, and promote photosynthesis of aquatic plants.

1. Removing algae from the glass surface before changing water

After 1 to 2 weeks from the aquarium tank setup, algae start to grow on the glass surface. Carefully observe the glass surface from various angles before changing water. If any algae are detected, scrape off the algae and then change water.

Scrape the glass surface with Pro Razor.

2. Sucking out dirt from an aquarium tank with a hose.

Suck out algae and other dirt from an aquarium tank with a hose before changing water. At this time, in order to avoid a layout from getting spoiled, adjust the flow rate by folding the middle of the hose by hand.

Suck out dirt on aquatic plants.

3. Changing one third of the water once a week as a guide

Drain one third of the water from an aquarium tank and pour fresh water with adjusted water temperature after removing residual chlorine. As a guide, perform water change once a week. However, adjust the number and amount depending on the aquarium tank condition.

When pouring water from a bucket, pour gently while placing your hand.
Supply amount of CO₂

The supply amount of CO₂ needs to be controlled depending on the growth condition of aquatic plants and water quality. Promote photosynthesis of aquatic plants by appropriately supplying CO₂.

1. Adjusting the supply amount depending on the volume of aquatic plants

When aquatic plants begin to flourish, the amount of CO₂ needed for photosynthesis also increases. Therefore, it is necessary to increase the supply amount. However, reduce the supply amount right after trimming is performed.

2. Adjusting the supply amount depending on the water quality

Drop Checker is a measuring instrument that can continuously check changes in CO₂ concentration of aquarium with the color of reagent. Install Drop Checker to an aquarium tank and use it as a guide for the supply amount of CO₂.

Liquid Fertilizers

Liquid Fertilizers are added as a nutrient supplement needed for the growth of aquatic plants. It is essential to add appropriate types and amount depending on the condition of aquarium.

1. How to add basic liquid fertilizers

In the aquatic plant growth period, add Green Brighty Neutral K and Green Brighty Mineral. Depending on the growth of aquatic plants, add Green Brighty Iron and promote the growth even more.

2. Adding liquid fertilizers depending on the situation

Different use depending on the water quality

Brighty K not only supplies potassium but also prevents pH from decreasing at the same time. When the pH level of the tap water that you are using is too low, or when the pH level is too low in the initial setup stage, use Brighty K.

When aquatic plants grow poorly

When there is a shortage of nitrogen in aquarium, the color of aquatic plant leaves becomes lighter, and the growth will also deteriorate. Supply nitrogen by adding Green Brighty Nitrogen as well as daily basic liquid fertilizers.
Introducing organisms

When organisms are introduced to aquarium, make sure to measure water quality and check if the water quality is safe for the organisms, and then put them into the aquarium tank. After introducing fish, don’t forget to feed the fish every day.

1. Introducing fish and invertebrates that eat algae

When the water quality stabilizes, introduce organisms for removing algae to the aquarium tank. Caridina multidentata is especially sensitive to water quality. Therefore, it is important to make sure that NO₂ is not detected before adding them.

<table>
<thead>
<tr>
<th>Species</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-10 Caridina multidentata</td>
<td>2-3 Otocinclus sp.</td>
</tr>
</tbody>
</table>

2. Introducing fish and daily feeding

Fish should be introduced to aquarium about 4 weeks after setting up. At the time of fish introduction, perform aeration and prevent oxygen deficiency of fish. Start feeding every day from the day after adding fish.

Pay attention to changes in water temperature, keep it at 23 to 25°C.

Fish Food AP Premium: Depending on the size and nature of fish, choose from 3 types of grains.

Equipment maintenance

It is important to keep equipment clean not only for the aesthetic viewpoint but for the proper performance demonstration. Environment in the aquarium tank is well-prepared with clean equipment.

1. How to clean Pollen Glass

Add 1L of water and a capful of Superge to Clean Bottle and soak Pollen Glass in the water with Superge. After soaking it for a few hours, remove the cleaning solution from the Pollen Glass and rinse it with tap water.

If the diffusion surface is dirty, the CO₂ supply becomes less effective. The clean diffusion surface creates fine air bubbles.

2. How to clean Lily Pipe

Just like Pollen Glass, soak Lily Pipe in a bucket with water and Superge. If using Spring Washer, dirt on the inside can be easily cleaned too.

The spring type handle is convenient for cleaning Lily Pipe.

3. Rinsing filter media

Open the filtration tank of a filter and check filter media every 2 to 3 months. If sludge has accumulated, restart the filter after rinsing the filter media with the aquarium water from the aquarium tank.

Be careful not to over wash the filter media.

After restarting the filter, add Green Bacter Plus to the aquarium tank.
Shape aquatic plants by cutting

In the daily maintenance, always observe the condition of aquatic plants, and cut the aquatic plants as needed. Frequent cuts are the secret to the well-maintained scenery.

1. Cutting aquatic plants that pop out

For stem plants, even if they are planted at the same time, they may not be always aligned neatly. When stem plants pop out while growing, cut them appropriately and maintain the aesthetic.

2. Cut over-grown moss

When moss is over-grown, it becomes easier for the moss to come off. Therefore, adjust the length by cutting them before it grows thick. Cut frequently to encourage the moss to attach.

3. Cutting damaged leaves and old leaves

Cut damaged leaves and old leaves regularly. For ferns such as Bolbitis, cut them at the base of the leaves, and promote the development of new leaves.

Trimming guide

In order to create beautiful underwater scenery, appropriate trimming for each aquatic plant species is needed. Be conscious of the composition and decide where a trimming line should be.

1. Cut stem plants after deciding a trimming line

Stem plants increase the volume while branching by trimming them repeatedly. As a result, it increases the sense of denseness. By trimming a few times, they become multi-branched from one stem, and create the beauty of plant cluster.

2. Trimming foreground plants

Trimming foreground plants can be effectively performed when using a pair of scissors with curved blade edges. Be careful not to forget trimming aquatic plants near stones.

3. Caring after trimming

If the volume of aquatic plants decreases, temporarily reduce the supply amount of CO₂ and liquid fertilizers. As a care after trimming, add Green Gain Plus and promote the development of new buds.
Algae removal

Algae spoil the aesthetic of the entire aquascape and inhibit the growth of aquatic plants. Keep in mind to detect early and remove them frequently with proper treatment methods.

1. Diatom Algae
   Diatom algae are fluffy algae in brown, and they tend to grow when setting up an aquarium tank with new filter media. Remove this algae with a hose, or by introducing slightly more Caridina multidentata after confirming the safety of water quality.
   - Roughly suck out Diatom algae with a thin hose.
   - Diatom algae will be removed in 1 to 2 days after adding Caridina multidentata.

2. Spirogyra
   Immediate action is required as soon as Spirogyra that have strong reproductive capacity, are found. After removing Spirogyra with a brush, temporarily shorten the lighting time, add slightly more Caridina multidentata and see how the situation goes.
   - Remove phosphorus that causes outbreak. Add 4 to 6 pushes as a guide.
   - Suck out Spirogyra with a hose after capturing them by having them tangle on a brush.

3. Blue-Green Algae
   Blue-Green algae similar to fungi such as mold, is troublesome because of its fast growth speed. Phyton Git Sol is an additive with viscosity in addition to bactericidal components, and it specializes in exterminating blue-green algae.
   - First, suck out as much blue-green algae as possible with a thin hose.
   - By adding Phyton Git Sol to outbreak locations, it helps exterminate remaining blue-green algae and prevent them from re-growing.
   - Rake out Asajirella gelatinosa from ditches of stones.

4. Green Algae
   For green algae, different tools should be used depending on the outbreak locations. Use Pro Razor for the glass surface and a nylon brush for a wide range such as driftwood and stones, and removal by feeding Otocinclus sp. is also effective.
   - Scrape off the green algae growing on stones to the smallest detail.
   - The brush part made of metal, makes it easy to remove tough algae.

5. Staghorn Algae
   Staghorn algae tend to grow in an aquarium tank that has been maintained for a long time. Remove them with a brush, or when they grow on aquatic plants, cut the whole leaves.
   - The brush part made of metal, makes it easy to remove tough algae.
   - Pro-Brush Hard

6. Asajirella gelatinosa
   It is translucent jelly-like and characterized by the round shape. They proliferate even from broken pieces. Remove them by sucking out with a hose while paying attention not to splash them in the water.
   - Rake out Asajirella gelatinosa from ditches of stones.

7. Beard Algae
   Accurately remove tough black beard algae with Pro Picker. Beard algae growing on aquatic plants should be removed with organisms, or by cutting the whole leaves.
   - Feeding can prevent beard algae from proliferating. Add young fish of about 3 to 4cm to the aquarium tank.
   - By adding Phyton Git Sol to outbreak locations, it helps exterminate remaining blue-green algae and prevent them from re-growing.
In this section, common problems during the aquascape maintenance are summarized. Prepare for possible troubles and learn coping strategies.

**CASE 1** Cautionary points for choosing fish
Avoid organisms that cause eating damages to aquatic plants and eat shrimps. And be aware that adding too many organisms may make the ecosystem become out of balance.

**CASE 2** Fish open and close their mouths rapidly on the water surface.
When fish experience oxygen deficiency, they demonstrate a behavior of gasping for air as opening and closing their mouths rapidly on the water surface. When you identify such a behavior, immediately perform aeration. When the oxygen deficiency occurs repeatedly, the environment of the aquarium tank needs to be reviewed.

**CASE 3** Suddenly, the water becomes cloudy.
When the water suddenly becomes cloudy besides the initial setup stage, it’s because there is something wrong with microorganisms in the filter. First of all, establish an environment in the aquarium tank by performing water changes to improve the water quality, and cleaning the filter and filter media. Moreover, in order to promote the function of microorganisms, add Bacter 100 and Green Bacter Plus dissolved in water, perform aeration and see how the condition goes for a few days.

**CASE 4** Planted aquatic plants keep floating in water
For stem plants planted in the background, one of the possible causes is that aquatic plants are not planted deep enough, and another possible cause can be the planting angle. Insert a pair of tweezers diagonally into the substrate and firmly plant aquatic plants in order to control buoyancy. Additionally, when an aquarium tank is filled with water, it becomes harder to plant aquatic plants due to buoyancy. Therefore, for both foreground and background, the key point is to add just enough water to make the substrate get submerged in water, and start planting aquatic plants.

**CASE 5** Moss comes off of driftwood
When Moss Cotton melts before moss attaches to driftwood, reattach moss. Drain water up to the part where moss has come off and reattach moss with Moss Cotton again. By trimming moss regularly while maintaining them short, it helps them stay in place and makes it harder for moss to come off. For moss that hardly attach themselves to the surface such as Vesicularia sp., Riccia Line which does not melt in water, is recommended to use.

**CASE 6** Aquatic plants stop growing
After about half a year of aquascape maintenance, the substrate supplies less nutrients, and as a result, poor growth of aquatic plants or whitening may be seen. By directly adding Bottom Plus to the substrate, it helps promote nutrient absorption from roots and improve the growth of aquatic plants. If Bottom Release is used in that case, Bottom Plus can be injected accurately and deeply into the substrate.

**CASE 7** How to keep cosmetic sand neat
In an aquascape with a cosmetic sand area and a soil area, some soil may end up being on the cosmetic sand area because of activities of living creatures, or daily maintenance such as water change. In that case, carefully suck out the soil with a thin hose. When the sand gets too dirty, suck out the entire cosmetic sand with a hose, and put it back after washing it, or spread new cosmetic sand.

**CASE 8** Shrimps and other organisms suddenly start behaving uncontrollably
If it happens immediately after planting aquatic plants, residual pesticide left on the aquatic plants may be the possible cause. When purchasing aquatic plants, make sure that they are pesticide-free. Wabi-Kusa and BIO Mizukusa no Mori are pesticide-free and safe for organisms.
Driftwood — Layout Process

1 Materials

Driftwood types and combinations
Choose which type of driftwood to use, and select a few pieces while considering the aquarium tank size. Unifying colors and textures is the key point. Choose one type of stone to combine with.

- Attractive shape with multi-branches. By attaching moss, it looks more natural.
- Its wild texture is distinctive. Use in combination.

2 Composition

Three basic compositions created with driftwood
In order to create a beautiful and stable composition structure, think about three basic compositions and arrange pieces of driftwood. When creating a composition, it is also important to think about planting space for aquatic plants.

- Concave composition
- Convex composition
- Triangular composition

3 Aquatic plants

Selection of aquatic plants that can affect the impression of an aquascape
The impression of an aquascape is mostly determined by aquatic plants. Especially the impression that background plants give is significant. Therefore, think about shapes and colors of background plants while selecting.

- Bright and flamboyant impression
- Deep and calm impression

4 Fish

How to choose fish that are suitable for driftwood layouts
In a layout composed of a wide variety of aquatic plants, the atmosphere looks more fun if different types of fish are mixed. Consider preferred swimming levels of each fish you are combining as well.

- Mixed fish
- Gentleness

Layouts with driftwood are attractive because countless layout variations are available with different combinations. Learn the basic knowledge and enjoy creating layouts freely.
Iwagumi — Layout Process

1 Materials
Stone types and how to choose stones
Select materials while imagining a layout you wish to create, and choose one main stone. Additionally, have several pieces of the same stone type in various sizes.

2 Composition
Basics of Sanzon Iwagumi
Sanzon Iwagumi which is the fundamental form of Iwagumi, is mainly composed of three stones in large, medium and small. After placing the biggest and well-shaped Oya-Ishi (main stone), arrange the rest of the stones in descending order.

3 Aquatic plants
Aquatic plants that suite well with Iwagumi
For Iwagumi layouts, it is recommended to plant short aquatic plants after narrowing down the types. Emphasize a simple Iwagumi with aquatic plants while taking advantage of a powerful composition.

4 Fish
How to choose fish that go well with Iwagumi layouts
With an Iwagumi layout with a simple composition, streamlined fish that swim dashingly in a large space, go well together. A single type of fish stands out wonderfully, and a school of fish swimming dynamically can be enjoyed.
Aquascape patterns are endless depending on the different combinations of composition materials, aquatic plants and fish. Develop your ideas and imaginations from various aquascapes.

**Aquascape example of W60cm aquarium**

Basic triangular composition created with stem plants

Aquascape with a triangular composition having space on the right side. BIO Mizukusa no Mori offers a wide variety of aquatic plants. Aquatic plants with various colors and shapes of leaves can be enjoyed.

Convex composition with stem plants, placing the center of gravity in the center

This aquascape has the center of gravity in the center with a convex composition arranged with driftwood and red aquatic plants. By keeping the fish simple with just a single type, the flamboyant look of the stem plants stands out even more.

Easy layout just by placing Wabi-Kusa

Layout with a concave composition by placing Wabi-Kusa and Mosa Rock on a thin layer of sand. A layout can be easily created just by placing Wabi-Kusa without any hassle of planting.

Creating a sense of denseness in deep green color

Aquascape in deep green tone by attaching moss to the entire driftwood. Eleocharis acicularis and a shade loving plant, Cryptocoryne create a dense atmosphere.
Expressing a wild view of the world with a piece of driftwood

If a large piece of driftwood is placed as a main focus, a wild view of the world can be expressed. By attaching moss and ferns to driftwood, make the aquascape look wilder.

Aquascape example of W60cm aquarium

Matching iwagumi and stem plants

Style that combines a simple iwagumi with gorgeous stem plants. By combining the powerful look of the iwagumi and softness of the aquatic plants and contrasting them, each strength stands out.

Recreating a local site with a selection of aquatic plants and fish

Aquascape with aquatic plants and fish native to Africa. By imagining a water area as a motif and using materials of the same origin, biotope-like elements are added to the aquascape.

Iwagumi layout with a bush in the background

Iwagumi layout with a Micranthemum micranthemos bush in the background. By controlling the line of Micranthemum micranthemos with trimming, a three dimensional aquascape that is different from carpet-like foreground plants, can be enjoyed.
NA Goods List for W60cm Aquarium Tank

This is a list of basic W60cm aquarium tank complete set and must-have Nature Aquarium goods.
Enjoy beautiful Nature Aquarium with the professional tools.

Substrate System
- Bacter 100
- Clear Super
- Tourmaline BC
- Power Sand Advance S
- Aqua Soil - Amazonia Ver.2 (5L)

Liquid Fertilizers & Additives
- Green Brighty Neutral K (300mL)
- Green Brighty Mineral (300mL)
- Green Brighty Iron (300mL)
- Green Brighty Nitrogen (300mL)

Water quality check
- pH Kit (5mL)
- Drop Checker
- Pack Checker NH₄
- Pack Checker NO₂

Layout & Maintenance Tool
- Pro-Scissors Wave
- Pro-Scissors S
- Pro-Pinsettes L
- Sand Flattener
- Pro Razor
- Pro Brush
- Moss Cotton
- Wood Tight
- Spring Washer S
- Supergrip
- Clean Bottle
- AP Glass

Fish Food
- AP-2 Premium

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ADA is working to boost information contents through various platforms in order for you to enjoy Nature Aquarium even more.

WEB AQUA JOURNAL
Various information about ADA including new aquascapes by ADA SUIKEI Creators, maintenance know-how, and how to enjoy DOOA products, is featured in WEB AQUA JOURNAL. It is updated on ADA official website every Friday.

https://www.adana.co.jp/en/aquajournal/

ADA OFFICIAL WEBSITE
Official website with information about ADA and Nature Aquarium including new product and ADA retailer information. Find the lineup of all products on the website too.

https://www.adana.co.jp/en/

YOUTUBE / ADAview
Uploaded on the 10th and 25th of every month. Fun videos about Nature Aquarium including production process of aquascape layouts and how to use ADA products, are uploaded on the channel.

https://www.youtube.com/user/aquadesignamano

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