

How to Create an Organic Aquarium

*The Beginner's Guide to Soil-Based
Freshwater Aquariums*

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Maintenance

HOW DO I MAINTAIN AN ORGANIC AQUARIUM?

The beauty of this method lies in trusting natural processes rather than imposing rigid maintenance schedules. As Lowenfels writes:

*Through intervention, the farmer risks damaging a crucial niche within the web. This can cause the web to operate imperfectly, creating a vicious cycle of increasing interventions*³³.

Understand that your role is not to micromanage, but to guide development and learn from responses. Through patient observation and minimal intervention, you'll develop an intuitive understanding of your aquarium's rhythms.

We have already covered roles of plant pruning, cleaning the glass, and water changes in our discussion of essential equipment. There are, however, a few more tasks to undertake to ensure our aquarium stays on the right path.

DAILY AND WEEKLY TASKS

Each day, start with observation. Take a moment to check your tank: is the water clear? Are your fish active and feeding well? Are your plants putting out new growth? These small visual cues can tell you a lot about the overall health of your system.

Next, check your equipment. Make sure the water temperature is steady, the filter or pump is circulating water gently, and the lights are running on their regular cycle. These quiet background systems keep your aquarium stable, so it's worth confirming they're working as expected.

Pay attention to detritus buildup on the substrate. One simple way to

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tell if there's too much is to watch how quickly food disappears. If leftovers from the morning's feeding are still sitting on the bottom by evening, skip the next feed and check again the following night. If food is still there, it's a sign your system may be overloaded with organics. In that case, perform a small water change (10–25%) and gently siphon away excess detritus. This soft reset helps restore balance and keeps waste from turning into toxic ammonia spikes.

Every few days, test your water. In the first few months, it's important to regularly check ammonia, nitrite, nitrate, pH, GH, and KH. If you detect ammonia or nitrite after the first 4 weeks, do a 25–50% water change. Once your system has stabilised, you can reduce testing frequency. Keeping a simple log of results and observations helps you track trends and spot problems early.

Once a week, top up any evaporated water using dechlorinated tap water. You can also take this time to prune fast-growing plants and gently spot-clean any algae from the glass if needed.

All of this takes just a few minutes, but these regular check-ins go a long way. They help you stay in tune with your tank's natural rhythms and keep your aquarium running smoothly.

MONTHLY AND QUARTERLY TASKS

While daily care keeps things running smoothly, longer-term maintenance helps your aquarium stay healthy as it matures. These occasional check-ins let you spot slow changes and step in before they become problems.

Every few months, consider whether your tank might benefit from a partial water change. If water parameters are stable and plants are thriving, there's no need to intervene. But if nitrates begin to rise, or something feels off, a small water change (10–25%) can help reset the balance. Always use dechlorinated water, match the temperature, and add gradually to avoid shocking your fish or stirring the substrate.

If you use a filter, clean it when you do your water change. Rinse sponges or mechanical media in old tank water (not tap water as it will kill beneficial bacteria) and make sure the outlets are clear.

Plant maintenance also shifts as your system ages. Fast growers may need trimming every couple of weeks, but every few months you may want to replant new cuttings or thin out crowded areas. This prevents nutrient

bottlenecks in dense patches and spreads new growth to different areas of the soil. Keep an eye out for signs of decay too; if there are a lot of dead or melting leaves, they should be removed before they overwhelm the system.

Once your tank is over 2 years old, it's worth assessing the soil itself every few months. Most organic substrates provide nutrients for 2 to 3 years, but this depends on how heavily the tank is planted and stocked. As discussed earlier in the book, you'll know the soil is nearing the end of its life when rooted plants begin to fade or stop growing, despite good lighting and stable water conditions. At that point, consider adding root tabs beneath your hungriest plants, or even rebuilding the aquarium with fresh soil. If you decide to start again, you will need somewhere to house your fish and invertebrates whilst your new aquarium stabilises.

Just like in nature, long-term balance is built on small seasonal shifts. These occasional tasks help you stay in step with your tank's slow rhythms and ensure it continues to flourish over time.

WHAT IF I DON'T KNOW WHAT TO DO?

Organic systems are complex, dynamic, and remarkably resilient, but challenges will still occasionally arise. Don't hesitate to ask for help. Online communities of soil-based aquarium keepers are generous with their knowledge and experience.

One of the best habits you can build early on is simple observation paired with light record-keeping. You don't need spreadsheets or special apps, just some way of keeping notes and a weekly photo of your aquarium taken from the same angle. Together, these simple tools can help you spot patterns that might otherwise go unnoticed. If something feels off and you're unsure why, sharing photos and a timeline of your observations can make all the difference.

Make quick notes of your water test results, and jot down anything unusual during daily checks: colour changes in plants or fish, shifts in water clarity, new algae growth, or odd behaviour. Record the dates of any actions you take – like pruning, water changes, or equipment tweaks. These notes become valuable reference points over time.

If you run into an issue, there's a good chance someone else has faced it, and hopefully even solved it. Reach out. Ask questions. Share your successes and setbacks. You don't need to be an expert to contribute something useful.