# Here's What You Need to Know About Filtration for Pet Turtles

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Anyone who has kept pet fish knows that a filter is important for keeping the water clean, and by extension, keeping the fish alive. While turtles don't have gills and aren't quite as sensitive to their aquatic environment as fish are, they will still get sick if the water that they live in is unclean. You can regularly remove and replace all of the water, but the problem with that plan is that turtles require much bigger tanks than fish do, so removing all of the water every week is not only inconvenient, but extremely wasteful.

Installing the right filter will reduce the amount of work you have to do to keep your turtle's enclosure clean, and also help keep your turtle healthier. Here's the basics of what you need to know about filtration for turtles.

# Types of Filtration

There are three types of filtration, and each address a different aspect of water quality.

#### Mechanical

Mechanical filtration uses filter media such as sponge, filter floss, or other material designed to trap particles and strain them out of the water as it goes through the filter. This is usually best at catching larger pieces of debris in the water, such as poo and food fragments.

### Biological

Biological filtration uses filter media designed to nurture the growth of beneficial bacteria combined with flowing water. These beneficial bacteria clean the water by converting harmful nitrogenous waste into more benign byproducts.

#### Chemical

Chemical filtration uses activated carbon to absorb and neutralize certain chemicals from water, such as chloramine, chlorine, tannins, and phenols. It is most useful for keeping the water clear and attractive, as well as helping prevent unpleasant odors.

## What's the most important type of filtration?

Ideally, your filter should have all three types of filtration to clean the water as thoroughly as possible.

### How Much Filter Do You Need?

Most aquarium filters are designed to dealing with the minor messes that fish make. Turtles are much messier animals, and their larger poo and greater quantity of food waste will quickly overwhelm the filter. The solution to this problem is to use a filter that is rated for at least 2-3x the amount of water in the enclosure. In particularly large tanks, using two smaller filters rather than one may be more practical, and possibly more effective.

The largest and most powerful aquarium filters on the market are canister filters. These filters are not cheap, but they are effective. Do not be tempted by less expensive under-gravel filters, internal filters, or hang-on-back filters, as you'll most likely just end up wasting your money.

## Do ponds need filtration?

Yes! Outdoor turtle ponds should be treated the same as the indoor ones.

### Filter Maintenance 101

Once your tank has fully cycled and your beneficial bacteria are established, you can introduce the turtle. However, this doesn't mean you can ignore your filter until it breaks. Regular maintenance is required to keep it working at max capacity to keep your turtle's water attractive and hygienic.

## **Replacing Filter Media**

For the most part, your mechanical and biological filter media shouldn't need to be replaced regularly, since that would remove the beneficial bacteria you've worked so hard to establish. However, chemical filter media (i.e. charcoal) must be replaced every 3-4 weeks to remain effective.

# **Cleaning the Filter**

Just like a vacuum cleaner, your turtle's filter needs to be occasionally cleaned out so it can remain effective. After all, all that gunk it takes out of the water has to go *somewhere*. And the more gunked up your filter gets, the less efficient it gets at keeping your turtle's water clean.

Make time to clean your filter every month. This is a big project, and it can be unpleasant at first, but keep in mind that this is just a fact of keeping a pet turtle. If you're not willing to clean the filter every month, a turtle isn't the right pet for you.

Here is the basic process:

- With dry hands, unplug the filter and take it to where you will be cleaning it out.
- Only use water to clean the filter, no soap or disinfectants.
- Remove all filter media and rinse the inside of the filter.
- Rinse filter sponges and replace any that have gotten too nasty.

- Rinse the gunk out of the other media.
- Replace the carbon insert.

Obviously, cleaning a filter is a very dirty process. While there's lots of beneficial bacteria in the filter, there's also going to be plenty of bacteria that is very capable of making humans sick. So you will need to pay strict attention to good hygiene before, during, and after cleaning your filter:

- Never clean a filter in the same place where food is prepared.
- Wear a pair of rubber gloves specifically purchased for filter maintenance.
- Disinfect all surfaces that came in contact with the filter and its components with a veterinary-grade disinfectant such as F10SC, Rescue, or Clean Break.
- Dilute disinfectants appropriately and let them sit for the recommended contact time before wiping away.
- Wash your hands and arms with soap and water, then dry them and apply hand sanitizer to the same parts. Remove and wash the clothes you were wearing, too.
- Sterilize your rubber gloves in boiling water.

#### Conclusion

Make sure to install your filter well before bringing your turtle home, as aquariums need time to cycle so the beneficial bacteria can get established — just like the CUC in a bioactive terrarium! And finally, keep in mind that while filters are very helpful in maintaining the water in a turtle tank, you will still need to change out 30% of the water in your tank every 1-2 weeks as an additional step in maintaining good



water quality.