

PISCES

PET EMPORIUM



Photo by Pisces Pet Emporium

Saltwater Aquariums

Size: Aquariums range from nano tanks less than three gallons to 200 gal +. Once established, a larger set up will be more biologically stable than a smaller one. Glass is preferable to plastic for construction.

Filtration: All aquariums require a filter to maintain water quality. In a marine environment, the substrate and live rock provide surface area for the growth of beneficial bacteria, which break down waste products in the aquarium. To support this cycle, marine tanks will employ a sump system/refugium set up, or a large canister filter, in combination with a protein skimmer. The sump/filter will consist of mainly biological filtration media, as this biological back up is the **MOST IMPORTANT** factor in filtration! Mechanical filtration is in the form of an overflow system and/or the skimmer, which helps remove build up of organics. Chemical filtration media, such as carbon, is rarely used. ****A new tank is biologically sterile when first set up and can take 4-6 weeks to become fully established. Pisces recommends: Tank Buster nitrifying supplement to boost bacteria.**

Substrate & Live rock: Aragonite, live sand, or crushed coral substrate is added to a depth of 1-3 inches, or approximately 1-2 lbs per gallon of water. These materials provide trace elements and buffers for coral and invertebrate growth. Adding creatures such as sand sifting starfish, snails, and gobies help churn up the substrate, and keep it healthy. Freshwater substrates such as gravel do not adequately support an appropriate marine ecosystem.

Live rock consists of coral skeletons or porous rock that has been colonized by forms of coralline (pink/purple) algae, corals, and small invertebrates/ zooplankton. These are all an essential component to creating and maintaining a reef environment. Cured and/or uncured live rock is added in a ratio of 1 to 1-1/2 lbs per gallon of water. When choosing live rock, select pieces that are light in weight, porous and covered with many types of coralline and macro algae. **Pisces recommends: Coralline Algae Accelerator and Reef Fx.**

Water Chemistry, Conditioners & Supplements: Essential products for a healthy aquarium include tap water conditioner (to remove chlorine/chloramines/heavy metals and replenish fishes' slime coat), biological boosters (to provide enzymes encouraging bacteria growth and maintenance of the ecological cycle), and waste breakdown/algae reducers (which introduce bacteria that reduce solid waste build up and compete for nutrients algae need to grow.)

Marine Salt is added to a specific gravity of 1.019-1.020 (fish only), 1.023 - 1.025 (invertebrates/ corals), or 1.023 for fish & reef. Reverse Osmosis (RO) units are another way to control water quality, by removing excess minerals and metals. Be sure to use RO water with an appropriate marine buffer/ salt mix. Iodide, calcium, and strontium are also required supplements for growth of soft and stony corals. **Pisces recommends: Marine Pro Steps 1, 2 and 3, Reef FX, and Tank Buster**

Heaters: The recommended heater size ratio is 5 watts per gallon. Most marine fish will need temperatures between 78 °F – 82 °F.

Lighting: The marine set up has slightly more complex lighting demands. LED, Metal Halides, compact fluorescent, and High Output T5 lights provide the best options for fish and corals. Wattages should be between 3-5 watts per gallon for optimum coral growth, with 10,000K and Actinic Blue spectrums being used in combination.

Stocking of Fish, Inverts & Corals: For most Marine tanks, the recommended fish load is 1" of fish per 5 gallons of water. With a new set up, wait until temperature and saline levels are stable before adding live rock/sand. Fish can be introduced when water quality (ammonia/nitrite levels) is stable (usually within 2 weeks). Invertebrates help as the clean up crew for the reef and can be added once the live rock is fully cured. Corals are added after 3-4 months, when the tank is well established and stocked. Do not add more than 25% of the tank capacity for the first addition and wait until the cycle re-stabilizes before adding more livestock. Keep in mind what the full-grown size will be when considering each addition.

Not all species of fish are compatible with each other or a reef environment. Predatory species include: Lionfish, groupers/basslets, frog/angler/scorpion fish, moray eels, goatfish/snappers, squirrel fish and large hawkfish. Reef destructive species include: most butterfly fish, large damsels, large wrasses, puffers/triggers, most boxfish, most big Angels, and some hawkfish.

Feeding: Most adult fish only need a small feeding once a day. Excess feeding can result in a drastic reduction in water quality. Marine fish will primarily consume frozen foods, but some will accept marine formula pellets and flake.

Important Tips:

- Never use chlorinated (tap) water to clean your filters, or live rock, as this will destroy the ecological balance in the tank. Remove 10-25% of the aquarium water every week and replace with treated salt water. Less frequent, or larger changes (>50%) may disrupt the ecological balance.
- Topping up for evaporation does not count as water replacement, as waste matter and organic debris remain in the tank. If topping up for evaporation, it is not necessary to add salt. Use dechlorinated FRESH water, as salts will remain concentrated in the tank water until removed.
- When doing water changes, be sure to dechlorinate your tap water, and premix the marine saltwater in a separate container, before adding to the tank. Add biological/waste control supplements after tank is filled.

Recommended Books: This care sheet is designed to provide you with some basic information on your new saltwater aquarium. To learn more about how to care for your saltwater aquarium, Pisces recommends: *The Marine Reef Aquarium* by Barron's Books and *The Marine Aquarium Handbook* by TFH.

Recommended Supplies:

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| <ul style="list-style-type: none"> <input type="checkbox"/> Canister filter <input type="checkbox"/> Protein Skimmer <input type="checkbox"/> Powerhead(s) <input type="checkbox"/> Salt <input type="checkbox"/> Substrate (sand/crushed coral) <input type="checkbox"/> Water change bucket <input type="checkbox"/> Heater and thermometer <input type="checkbox"/> Algae magnets, scrub pads | <ul style="list-style-type: none"> <input type="checkbox"/> Hydrometer/Refractometer <input type="checkbox"/> Flake food <input type="checkbox"/> Pellet food <input type="checkbox"/> Frozen food <input type="checkbox"/> Seaweed and seaweed clips <input type="checkbox"/> Saltwater master test kit <input type="checkbox"/> Fish Net |
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It is the responsibility of any aquarist to provide their tank with regular maintenance to ensure optimum water quality and to prevent fish illness or loss. Should you experience any problems with your new tank, please contact staff at Pisces Pet Emporium. We will make every effort to assist you, but we cannot be held responsible for any fish, coral or invertebrate loss.

A Saltwater tank is a large responsibility and should not be purchased without due consideration. Fish, corals, and invertebrates should never be released into the wild.



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