

## Fish-only Versus Reef Tank

### The pros and cons of reef aquariums.

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Q. I just purchased a 150-gallon glass aquarium that I would like to make a saltwater aquarium. I cannot decide whether to do a fish-only aquarium or a reef aquarium. What are the pros and cons of each setup and which one is cheaper and less time-consuming to maintain?

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A. Any marine aquarium is an expensive proposal. Even small nano-reef aquariums can become costly and if the aquarist cuts too many corners it may fail very easily. With a marine aquarium as large as 150 gallons, cost becomes a serious factor because just stocking the aquarium with substrate and live rock will not be cheap. Luckily, because the larger the volume of water the easier the aquarium is to maintain, your 150 gallon aquarium will be less of a headache than a smaller system. You may even find that routine aquarium maintenance in the marine field is often not as time consuming as maintenance of some freshwater systems.

In an aquarium size, I am going to recommend that you strive for a reef aquarium. Experts often say that newcomers to the saltwater hobby should not attempt a reef aquarium. However, with new technology and methodologies, even beginners can keep large reef aquariums. The main reason I think keeping a reef aquarium is possible for beginners is that if you can keep a reef, you can keep any aquarium system. Either way, live rock is fundamental to your reef aquarium's biofilter and important for your animal's health. Live rock is often what causes the price of a marine system to outweigh a freshwater aquarium of the same size. Because live rock contains many beneficial crustaceans, you will have an invertebrate aquarium whether or not you intend to. Also, because copper kills invertebrates and in a sense live rock as well, the use of copper to treat marine parasites will create negative side effects. So, if you implement live rock filtration, you are two-thirds of the way towards having a reef aquarium anyway.

Because many reef aquarists use only live rock and a protein skimmer to filter their water all you would need to add for corals is a good lighting system. Some smart shopping and research can turn over a lighting solution that not only works well for most corals, but is somewhat inexpensive as well. Even though salt mixes, reef supplements and food for live corals can become expensive, many of these expenses would also be present in a fish-only marine aquarium.

As for upkeep and maintenance, most reef aquariums do fine with a 10 percent weekly, 20 percent monthly water change. In your case that would be 15 gallons once a week and 30 gallons once a month. Mixing saltwater at least 24 hours before, with the same density as your system's water, is the best approach.

The best thing about reefkeeping is you will get a full course in water chemistry and water quality. You will get to observe a wide variety of behaviors from both fish and invertebrates. Keeping fish populations low can limit the need for expensive filtration and tiresome maintenance. An aquarium with a large number of fish requires a greater amount of feeding, thus raising nutrient levels in the aquarium. A low fish population can make maintaining nutrient levels easy and lessens the need for partial water changes. Some reefkeepers' systems with low fish populations are successful when maintained with only 10 percent water changes once a month.

Personally I think that, when properly set up, both fish-only and reef aquariums are comparable in price. As for maintenance, some aquarists argue that properly set up reef aquariums can actually be easier to maintain, from a partial water change perspective, than a fish-only aquarium.