

"A reef tank is the beauty and serenity of the ocean, in the comfort of your home."



What is the Greater Iowa Reef Society?

The Greater Iowa Reef Society is a club whose primary goal is to promote a better understanding of the marine life that we keep in our home aquariums. We have four primary geographical areas (Des Moines, Waterloo/Cedar Falls, Cedar Rapids/Iowa City and Quad Cities) with local trustees and regional events in all of these areas. The club is a great way to meet new people with similar interests, get questions answered, buy and sell equipment and livestock, and help others. Check out our site at www.iowareefs.com for more information about the club, answers to questions, and a schedule for local events in your area including tank tours, monthly socials and frag swaps. Hope to hear from you soon.

Got questions?

Let us know and we'll help. We're newbie friendly and firmly believe that you can never know it all; we're all still learning.

Log on to our forums at www.iowareefs.com



Greater Iowa Reef Society

E-mail: board@greateriowareefsociety.org
Website: www.iowareefs.com

*Some content based on "Thinking about setting up a saltwater aquarium" by Marc Levenson (www.melevsreef.com).
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So you want to start a reef tank...

Some of the basic information that you'll need in order to get started.

Provided by



Greater Iowa Reef Society
<http://www.iowareefs.com>



Tank Size

Your tank should be large enough to comfortably support the fish and other livestock when fully grown. While over populating is tempting, caution should be exercised so that you don't stress your fish.

Type of Water

To avoid nuisance algae growing in your tank, it is recommended to get Reverse Osmosis De-Ionized water. It can typically be purchased at your local pet store, supermarket, or you can make it at home using a RO/DI water filter. Tap water contains elements that are detrimental to your saltwater tank including chlorine, phosphate, nitrate, fluoride, etc. It's recommended to use filtered water rather than to use additives (such as Amquel) to neutralize these materials.

Salt

Marine salt is readily available at most pet suppliers, and Reef Crystals is very popular and easy to find. When you are setting up your tank, or when you do water changes, you always mix the salt in your water before you add it to your tank. You'll need a hydrometer, which gives you a "salinity reading" to mix the salt to the correct level. To gauge your mixing, use ½ cup of salt per gallon of water, but test it with the hydrometer. You want your salt level at 1.026 sg (specific gravity), and your water's temperature at that reading should be 78 degrees. As water evaporates from your tank, you only need to add new RO or distilled water, because only water is evaporating from your tank. The salt is still there. Adding saltwater would only increase the salinity of your tank and cause problems for your fish.

Heating and Cooling

Your tank needs to have a stable temperature, ideally between 78° and 82° (although 76° to 84° is acceptable). A heater will help keep things from getting too cool in the winter, and a fan blowing across the top

of your tank may help your tank from getting too warm in the summer. This is especially the case if you have high powered lighting.

Food

Many marine fish will eat a wide variety of foods from flake food to frozen food or live food. Each inhabitant may have different dietary requirements and these should be considered when putting the livestock into the tank. For example, damsel fish are hearty and can eat just about anything, but a mandarin dragonet should only be added to well established tank with a health population of copepods. Some corals are photosynthetic only and some require feeding. Once again, consult someone that knows the livestock before adding to your tank so it can be properly cared for.

Lighting

Most tanks come with a single fluorescent bulb, which is sufficient for fish. If you desire greater variety of items, such as corals, anemones, clams, you'll need far more lighting to allow them to thrive. When you get to that point, then your options will be T5, VHO, PC (all of which are varieties of fluorescent bulbs) or Metal Halide. These can be costly, but your inhabitants will respond with healthy growth. Different livestock has different requirements so you may want to ask someone about what lighting is right for your tank. A simple timer is recommended to keep your lights on a regular cycle.

Water Tests

It's very important to regularly test your saltwater tank to make sure the water is healthy. You'll want to test pH, Ammonia, Nitrite and Nitrate at a minimum. Your pH should be 8.0 to 8.3, Ammonia and Nitrite should be 0, Nitrate should be 20 ppm or less. Also, check your salinity to make sure it has

remained stable at 1.026.

Protein Skimming

Protein skimming keeps your water clean and pure. There are many types of skimmers on the market; as with anything, some work better than others. You should research skimmers to find one that's appropriately sized for your tank. This one item impacts your ongoing water quality more than any other item (assuming you are using RO/DI water to begin with). What the skimmer does is inject air into a column of water in the unit, which creates tiny micro bubbles that carry dissolved organic compounds out of your tank and into a collection cup that you can pour out and rinse quite easily. An added benefit of this device is it adds oxygen to your tank. A good skimmer will probably cost you \$150 or more, but it's an important purchase.

Filtration

Filtration can be done in a number of ways; however, most prefer to filter using live rock. Live rock is filled with tiny creatures, feather dusters, worms, and beneficial bacteria that eat the waste that occurs in your tank. Additional filtration (such as canister filters) can be supplemented if you wish.

Circulation

Using a few power heads in your tank will move water throughout the tank. If you can avoid "dead" zones in your tank, nuisance algae will be less likely to grow. Cyanobacteria, for example, grows in areas that are stagnant.

Cycling the Tank

As with freshwater fish, saltwater tanks need to be cycled. A cycle can take as much as six weeks. The cycle should be completed prior to adding livestock (this includes your snails and hermit crabs).

Patience

As you add fish to your tank, you increase the biological load in your tank. It can only accept so much at one time, so it is far better to add new things very slowly to your tank, rather than all at once. That way the beneficial bacteria in your tank can increase to handle the new load and not create a sudden Ammonia spike in your tank. By adding things slowly, the tank, the water, and the natural filtration will adjust for the new load. Remember, nothing good happens fast in a reef tank.