## DEDICATED TO SUCCESSFUL SALTWATER AQUARIUM KEEPING

Vol. 1 No. 2 Copyright© 1994 by Aqua Craft®, All rights reserved.

Summer 1994

## **REEF AQUARIUMS**

Some of the most spectacular saltwater aquariums are known as Reef Aquariums. One benefit of owning a reef aquarium is that a variety of reef life, from all oceans can be kept in the same aquarium.

Sea anemones, hard and soft corals, sponges, algae, sea fans, clams, shrimps, live rocks, and other invertebrates along with a few small compatible fish can be kept for years in a properly equipped reef aquarium.

In nature, most reef aquarium inhabitants are collected in water from 3 to 20 feet deep. In the reef aquarium, these pets will require placement under suitable lighting.

Other reef inhabitanats collected from 20 to 60 feet deep will require placement at or near the bottom of the aquarium, or in shaded areas.

Decorating the reef aquarium with "live rocks" will not only add to the natural beauty of the home aquarium, but will assist in conditioning aquarium water. Live rocks also offer many places to position and display your reef pets.

A simple trickle filter located above or under the aquarium is the minimal filtration that is required to keep a healthy reef aquarium. The trickle filter should contain BI OX® as the primary filter medium. One cubic gallon of Super BI OX® (about 325 pieces) will maintain about 45 US gallons of reef and/or marine fish aquarium water.

Most reef aquariums operate well with a temperature of about 73°F-77°F (23°C-25°C) and a specific gravity of 1.022-1.025. Regular water changes will reduce the natural buildup of nitrates and phosphates.

Small reef aquariums can be fitted with multiple fluorescent lamps. Large size reef aquariums can be fitted with halide and fluorescent lamps.



Reef aquariums that are 12 to 16 inches deep (under 25 US gallons) can be outfitted with four or more fluorescent lamps that run the width of the aquarium.

It is best to use a mixture of daylight (not cool white) and actinic 03 lamps. Actinic 03 lamps provide a blue color (about 410 nanometers) that approximates daylight from about 15 to 40 feet deep in nature. Usually two daylight and two actinic, or three daylight and one actinic lamps can provide enough illumination so most reef inhabitants will thrive.

Reef aquariums that are 18 to 22 inches deep (35 to 60 US gallons) will require a minimum of six or more daylight and actinic lamps that run the width of the aquarium. For 45+ gallon aquariums a better choice would be using one 175 watt halide and one or two actinic lamps.

Large display reef aquariums that are six feet wide or more and over 30 inches deep will require three 175 watt halide lights placed so light is dispersed evenly in the aquarium. Two actinic lights that run the width of the

For reef aquariums that are 24 or more inches

deep, one or more 175 watt halide lights and

two actinic fluorescent lamps that run the

width of the aquarium are required.

aquarium are required.

It is best to put multiple lights on timers. One or two fluorescent lamps should come on first and go off last. After 15 or more minutes other lamps can be automatically activated. This creates the more natural effect of sunrise and sunset. Timers also allow less thought and work and more enjoyment for the reef keeper.

It is important to maintain the highest water quality in all marine fish and reef aquariums. Regular water changes reduce the naturally occurring buildup of organic wastes and replenish elements used by captive marine pets.

## Water quality starts with your water.

It is essential to use a good marine salt such as Coral Marine<sup>™</sup>, a scientific formula. A better marine salt is BIO-SEA<sup>®</sup> marinemix. The best salt for all marine fish and reef aquariums is Marine Environment<sup>®</sup> dual phase formula<sup>™</sup>. ◆

MARINE AQUARIST™ was created for the benefit of amateur and professional marine aquarists. Topics may include: water chemistry, system design, filtration, lighting, nutrition, mariculture, aquatic and chemical science, collecting, shipping, importing, selling and keeping many forms of marinelife in captivity.

MARINE AQUARIST™ is published quarterly for free distribution through aquarium stores.

Dealers can receive copies of *MARINE* AQUARIST™ at no cost for handout to their customers by calling California Aquarium Supply House™ at 1-415-595-3939. Ask to be included in our mailing list.

Interested aquarists can receive free copies through 1994 directly by sending their name and address to: *MARINE AQUARIST*\*\*
P.O. Box 1233, Belmont, CA 94002.

MARINE AQUARIST™ is published by AQUA CRAFT®, INC. P.O. Box 653, San Carlos, CA 94070