## Macroalgae

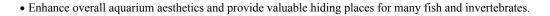
Drs. Foster & Smith Educational Staff

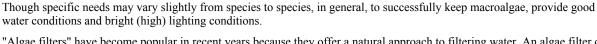
## "Good" Algae Combats the Bad

Add a few of these intriguing, aesthetic plants to your marine aquarium, and watch your setup come alive with color, better water quality, and content inhabitants.

In the simplest terms, <u>macroalgae</u> are large-celled, photosynthetic algae. Available in several varieties, they are a valuable addition to a saltwater aquarium, as they:

- Provide a great food source for <u>tangs</u>, <u>angels</u>, and other herbivorous animals.
- Naturally filter aquarium water by reducing the available levels of phosphate and nitrogenous waste.





"Algae filters" have become popular in recent years because they offer a natural approach to filtering water. An algae filter or "scrubber," is simply one or more types of macroalgae grown in a sump or <u>refugium</u> below a main aquarium or in a <u>side-mounted refugium</u>. An established scrubber can help remove pollutants from the main aquarium, so undesirable species of algae will not grow. Many aquarists also use their macroalgae sump or refugium for <u>live sand</u>, <u>live rock</u>, and for raising amphipods and copepods found in live rock.

For best results, give your scrubber 18-24 hours of light daily. This extended photoperiod allows the macroalgae ample time to convert carbon dioxide into oxygen. If dark periods are too long, macroalgae uses most of the available oxygen and releases excess carbon dioxide, resulting in a pH decline. Prune and remove excessive growth from your scrubber on a regular basis.

## Popular Varieties of Macroalgae

Macroalgae are available in a wide variety of species, styles, and colors perfectly suited to aquascaping or decorating saltwater aquariums.

- Halimeda (Halimeda sp.) Grown in the pristine waters of the Hawaiian Islands, this hardy, slow-growing, spherical plant uses calcium to build a support structure within its blades. Because of this, few herbivores feed upon it, and it usually lives long in the aquarium.
- (*Caulerpa sp.*) This common plant is a favorite snack of herbivores. Its rapid growth helps improve water quality and fill in empty areas. Caulerpa can be found in various shapes, including flat blades, feather blades, notch leaf, and a grape-shaped variety. Caulerpa is usually collected from the coastal regions of Florida, where it is prevalent in the rocky estuaries.
- Maiden's Hair (Chlorodesmis sp.) Resembling a thick mat of bright green carpet, Maiden's Hair algae provides a very soft appearance plus all the benefits of macroalgae. Most Maiden's Hair is collected in Tonga or Fiji, and arrives attached to a small piece of live rock.

