

Why It's Called Live Rock

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The Reef System in Miniature

The biological diversity found on live rock is a microcosm of the natural reef environment. It is this diversity that helps replicate, in the home aquarium, the efficient use of nutrients found in nature. The balance struck between the import and export of nutrients provides effective control of aggressive growth of opportunistic organisms. All live rock inhabitants are important parts of the reef ecosystem (neither good nor bad) but some species become problematic when conditions in your reef system are out of balance.

[Live rock](#) bursts with a variety of life forms ranging from microscopic plants and animals to larger algae and invertebrates including coralline algae, [sponges](#), [feather duster worms](#), [macroalgae](#), microcrustaceans, and countless others. This diversity of life and its rugged, unpolished beauty make live rock a prized addition to any marine aquarium.

Under proper conditions, this plethora of organisms flourish and each organism performs a different function and contributes to the overall health of the entire system. Live rock, rich with life, provides many benefits. For example, coralline algae and macro algae are very useful in controlling the growth of unsightly nuisance algae by actively competing for space and nutrients. Macro algae also provide food and shelter for other species and offer a visually appealing presence in the aquarium. Sponges and feather dusters, besides being beautiful inhabitants, filter out particles and organic materials to keep your aquarium clearer and cleaner.



Potentially Problematic Inhabitants

Bristle Worms

Bristle worms are beneficial scavengers that feed on detritus and dead organisms. However, an abundant food supply results in a fast growing population leading to potential attacks on crustaceans, corals, and anemones. As they grow in size, in some instances up to 24", their presence in your aquarium can be very unsightly. Improved water flow, aggressive skimming, and nutrient control keep their population in check by minimizing their food supply.

Aiptasia

Aiptasia is an opportunistic anemone that populates itself like weeds. In certain conditions, a single animal can produce more than 60 offspring per day. Aiptasia is most commonly found on rock cultured or harvested from the Caribbean. A nutrient-rich aquarium is a perfect habitat for aiptasia to proliferate. Not only do they thrive on excess food, they can propagate where other, more beneficial species cannot. Once established, getting rid of these pests can be difficult.

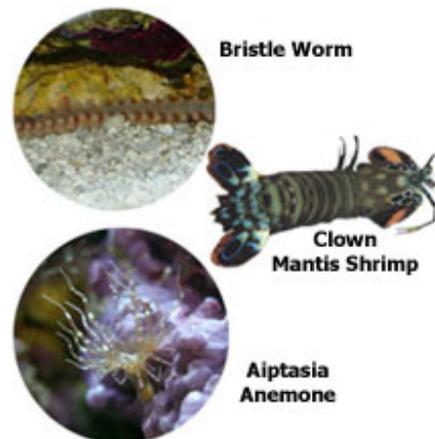
The [Copper-banded Butterfly fish](#) is the least-taxing method for long-term control. The flip side to housing this Butterfly fish is they also feed on other invertebrates such as feather duster worms. Furthermore, there is no guarantee a particular individual will be interested in feeding on the aiptasia. [Peppermint shrimp](#) are also used to keep aiptasia anemone populations under control.

Mantis Shrimp

Your best cue that your system contains at least one of these predators is the disappearance of numerous small fish over time without a trace. They are also known to eat mollusks and other invertebrate livestock. You'll want to protect your aquarium inhabitants by promptly ridding your aquarium of mantis shrimp. Though difficult to do, the best way to rid these predators is to trap them, either by using a [fish trap](#) or by waiting until they crawl into a rock and then removing the rock.

Prevention

The single most important thing you can do to prevent the proliferation of potentially problematic inhabitants is to properly [cure your live rock](#). During the curing process, examine your live rock carefully and remove unwanted organisms. Once properly cured, the key to a thriving live rock



habitat is to maintain proper water conditions.

Do not allow water conditions to deteriorate. A nutrient-rich environment triggers the rapid increase of organisms to problematic proportions. This imbalance favors aggressive opportunistic organisms and inhibits the growth of beneficial organisms.



Encourage healthy diverse populations common on live rock by [testing](#) water parameters on a regular basis, performing regular [aquarium maintenance](#), avoid overfeeding, maintaining appropriate water parameters, and providing good [water movement](#), [filtration](#), and [lighting](#). The diversity of beneficial inhabitants not only provides aesthetic benefits but, more importantly, contributes to the overall health and success of your marine aquarium.