

## Mini-Reef Aquarium Lighting

**The amount of aquarium light needed for a mini-reef tank depends on the fish and corals being kept.**

*By J. Charles Delbeek*

Q. I would like to start a mini-reef system, and I know that a 35-gallon tank is probably the smallest tank I should attempt because as a beginner it may prove more difficult than I had anticipated. But after 11 years in the freshwater hobby I'm confident that I will be able to handle it.

My aquarium only has one fluorescent tube. I have been given conflicting information on lighting — one source says that I will need at least two tubes to maintain corals, while another says that I can get by with one tube provided I use a broad-range full-spectrum tube. Books I have read, however, state that four to six tubes are necessary. I would appreciate any information you have on this. If more than one tube is necessary can I still keep live rock with just one full-spectrum tube and have at least some forms of plant life thrive?

A. There are many ways to maintain a mini-reef aquarium. What you must first decide is the types of animals you want to keep. If you would like to try organisms that require lots of light, such as corals or zoanthids, then a single fluorescent lamp, no matter what the spectrum, is inadequate. I should qualify that by saying that there are various types of fluorescent lamp wattages — regular, high and very high output (VHO) — from which to choose, and you could manage quite well with a single VHO lamp depending on what you wish to keep.

You can maintain live rock with a pair of regular output fluorescent lamps, and still see some algal growth — especially coralline algae — provided the water chemistry is adequate (proper alkalinity and calcium levels, and so on). But, if you hope to keep any corals or other light-dependent organisms, you will need at least four regular or two VHO lamps.

Basically, the more light you can provide, the better your animals will do. Within reason that is. So, welcome to the great lighting debate. It is but the first of many controversies you will discover in the reef hobby.

In summary, plan out what types of organisms you wish to keep and then tailor the system's technology to suit them. Although you may have extensive experience with freshwater fish, I think you will find that keeping a miniature reef aquarium will be a whole new "kettle of fish." (Sorry, I couldn't resist!)