

Feeding Reef Aquarium Fish

How often should I feed my reef aquarium fish?

By J. Charles Delbeek

Q. I have a 55-gallon tank that houses a flame angel, a coral beauty, a spotted hawkfish, a yellow tang, a regal tang and a strawberry pseudochromid. The tank uses a wet/dry filter and an in-sump protein skimmer. The lighting is provided by two 48-inch 50/50 110-watt fluorescent tubes. Powerheads are at each corner of the tank for circulation. I already have about 35 pounds of base rock, and recently added some high-quality Haitian live rock (about 35 pounds).

I had been feeding my fish twice a day — once in the morning (usually marine flake food) and once in the late afternoon (usually frozen brine shrimp or bloodworms). I also provide some romaine lettuce for the tangs so they get their share of greens. I've been told that as I start building my mini-reef, my fish will not need as much feeding because they can harvest from the abundance of organisms that come with the mini-reef system. I've been told to reduce feedings to twice a week to encourage the fish to harvest. In your opinion, is this a sound practice? Thank you very much!

A. In a nutshell, I would say no, it is not a sound practice. It seems very appealing and a somewhat more natural way to do things, but in reality it does not work, especially in a tank as small as yours with the fish you have. Although the two pygmy angels and the tangs can graze algae all day in your tank, the time will come when they will graze it down until very little is left, and it will not grow quickly enough to keep them fed — especially the tangs.

The condition in which most tangs are kept in home aquariums and the many retail shops I have seen is simply appalling. These fish are constant grazers. This is particularly true of the regal tang (*Acanthurus lineatus*), which is a tang that lives in heavy surge areas, where it grazes constantly on turf algae. They require large quantities of algal matter in order to maintain their body weight. The meager amounts of food they can graze from a small tank are not enough for them to stay plump and healthy. One has only to look at photos of tangs on reefs to appreciate that these are heavy-bodied fish. Compare those images to what you see in most home aquariums.

I would recommend that you feed your tangs a great deal more algal matter. Nori and other freeze-dried seaweeds are a much more natural food source than romaine lettuce. Ocean Nutrition sells a complete series of dried marine algae that would be better than any terrestrial source of plant matter.

The hawkfish and pseudochromid are carnivorous predators and will hunt down most small crustaceans and worms in your tank. They can live off the life on and within the live rock, but the time will quickly come when they have grazed your population of food items too low to sustain themselves. You need to feed them at least once a day, and perhaps more depending on their state of health.

With all the feeding you are doing I am sure your trickle filter is having a field day generating nitrates. You might want to consider increasing the size of your skimmer and removing the bio-media from your wet/dry to help deal with this. Several hobbyists have reported that increased feeding was possible when larger, more efficient protein skimmers were added to their systems, without any noticeable detrimental effects.

If the tank is large enough or the fish are small enough, then it is possible to maintain them in good health with minimal feedings and allow the system to provide food for them, but this is a difficult balance to achieve. Adding a small tank, in circulation with your main tank, is one way to provide some additional live food. This tank would be stocked with small shrimp and abundant live rock. The organisms in this tank would provide planktonic food for the main tank via their reproductive efforts. Known as a "refugium," its popularity continues to increase as people discover this concept. Again, size and stocking levels must be balanced to assure a steady input of food to the main tank, and to ensure that the refugium can provide enough of the right food to maintain the organisms in the main display tank.