

## Flatworm Reef Tank Infestation

**Sudden flatworm problems are often the result of a significant increase of food in a reef tank.**

*By J. Charles Delbeek*

Q. I'm new to the hobby of reefkeeping, and your magazine has been immensely helpful in getting me started. I have a 60-gallon hexagon tank. I set it up using live sand with a plenum as the biological filter. The occupants are a bubble coral, a feather duster, two brittle stars, a serpent star, a common clown, a royal gramma and a sixline wrasse.

I recently moved my aquarium setup — a very trying and exhausting experience, I might add — and none of the occupants seem to have suffered because of the move. The problem that I now have is a flatworm infestation. These worms were not visible when the tank was at the previous location for about eight months. What can I do to get rid of these ugly looking things? One of my local retailers suggested the sixline wrasse, another suggested a mandarin fish.

A. During a recent dive trip to the Lembah Strait area of Sulawesi, Indonesia, I noticed that flatworms were extremely abundant on corals such as *Plerogyra sinuosa* (bubble coral), *Tubastraea* sp. (sun coral) and *Lobophyllia* sp. (tooth coral). This area was rather turbid, with a lot of sediment. In shallow areas near the resort I found large stands of *Acropora*, some of which had large sections that were bright green and others I thought were merely brown. When I waved my hand over these "brown" *Acropora*, the brown began to flake off! The *Acropora* was so heavily infested with flatworms that it made whole sections of the colony appear brown!

I also found that in the lagoons of Palau where the water was also turbid and there was very little current, large stands of *Montipora capricornis* were almost completely covered with brown flatworms. These flatworms are more likely to feed on coral mucus and may also incorporate photosynthetic pigments in their bodies.

Although you don't mention it, I assume the flatworms you are reporting are not of this type, but instead, are of the whitish, free-living variety. When you moved your tank you also moved the material in it. Underneath there was probably quite a bit of detritus, not to mention what was stirred up from the substrate.

Flatworms are mainly detritivores and are always present to some degree in a reef aquarium. In fact, they are extremely valuable because they help to convert detritus into forms that can be used by the bacteria in and on your live rock and substrate. What I believe may have happened is that when you moved your tank you caused a release of detritus that allowed the flatworms to proliferate.

There are a few things you could do. First, you could do nothing. As the worms consume the horn-of-plenty you created as a result of the move, their population will gradually decrease to the point where you will be hard pressed to find one. You can help this along by siphoning them out if you like, but doing so may prolong their presence as they will simply proliferate anew because you have not reduced their food supply at all.

You could introduce predators like mandarin fish — the species you specifically want is *Synchiropus picturatus*. It's hard to say which wrasse species feed on flatworms, although there is some anecdotal evidence to suggest that *Macropharyngodon* (e.g., the leopard wrasse) may feed on them. I am not sure the sixline wrasse will do much good because they are primarily crustacean and gastropod feeders.