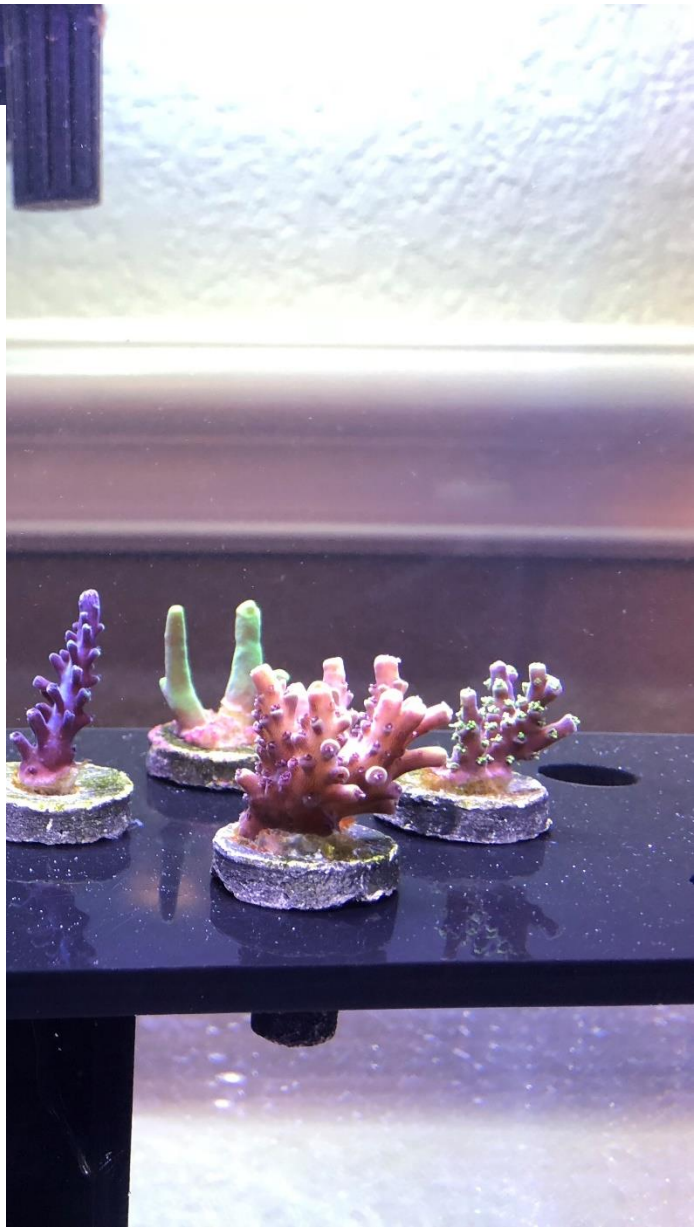
Common Coral Pests



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USAC
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Preface

The rush to fill it up

The hobby moves fast and with it comes those trips to the fish store that received the latest shipment, limited amounts of critters new to your eyes, which you must get as you dream of how it will look, grow, and fill that void in your tank. Next, the disappointment of why it didn't make it and searching for answers, which when you find them it's too late. The frustration grows and the dollars lost forever creep as people whom don't indulge in the hobby look at you crazy because they don't understand the time and effort you've put into getting things right, just for it to waste away before your eyes. Feel it yet? If not, you don't want too.

This is to help better serve our reefing community in combating the horror stories we all hear about but hope to never experience. One of the primary reasons this hobby continues to exist must be the perseverance of those that fell in love with the hobby, experienced the pitfalls, and refused to succumb to the pressure no matter the loss. I'd be lying if I told a new reefer whom was getting into the hobby that there wasn't challenges, with that said I felt a quick information source about the pests we encounter, that I wish I knew right in the beginning, could be a tremendous source for both new and experienced hobbyists. To be able to identify right away as opposed to dismissing something because I didn't know enough to begin with and the potential this unknown creature had at the time. This hobby will surprise you, and the longer I'm at it the more I know, some I can put to good use, while others I wish I didn't have to experience to gain the knowledge.

I'm sure this will need to be updated throughout the years as the ocean is only 7% explored now and trying to recreate a microcosm of sorts in our aquarium can bring the challenges of identifying the new creatures associated to more discovery, which sometimes may be identified, but overlooked for their role in the large scheme of things. This is meant to be short and sweet, like a field guide so to speak, you'll need to research for more info on your own.

Flatworms

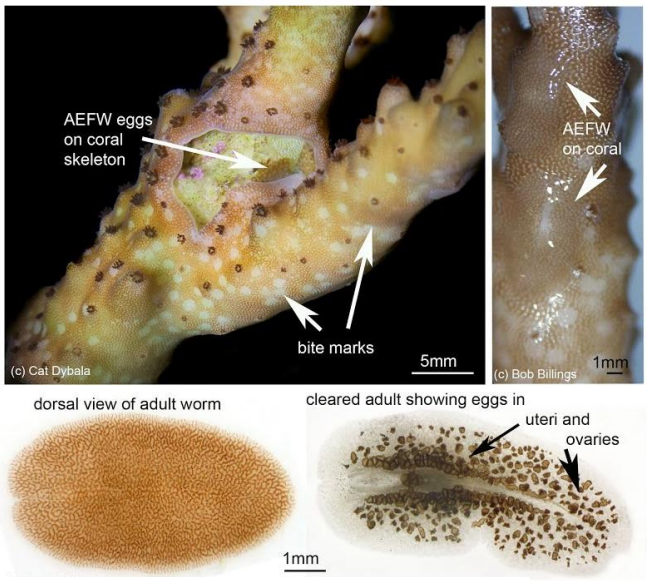


Fig 1** Photo credit ; Joseph Weatherson

Coral types affected-SPS & LPS
Description-thin, flat, can be translucent or multicolored depending on type. Several classifications they can fall into.
What to look for-On Acropora they are often referred to as AEFW, look for circular bite marks. Skin of the Acroporas should be smooth and clean of any abrasions. These are very translucent and can be missed while glancing over them as they camouflage well against the body of the acropora. Recommended to remove frags from mounts to inspect for eggs, often laid in clusters. These are very small often no larger than ¼". Usually hide more during the day to avoid predators.



Fig 2** Photo credit ; Joseph Weatherson

On LPS, types of Polyclads have been known to infest. Look at the base of the crown for signs of infection. They are very complex in reproduction as they are hermaphroditic.

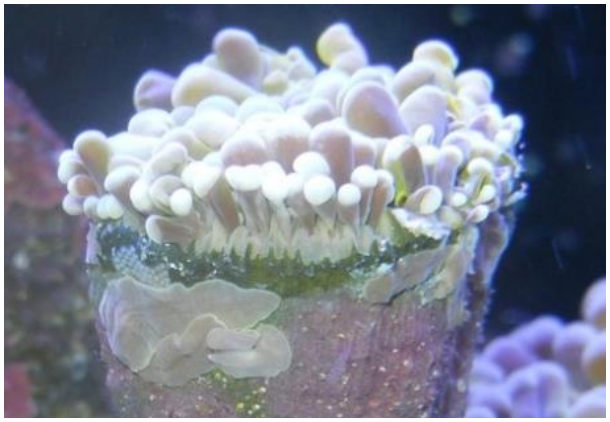


Fig 3** Photo credit ; User Huly-Reef Central

How to Treat-Dip the corals after acclimation and inspect dip for any signs of pests. If encountered in tank treatments are available but will come with a higher risk associated to your inhabitants. Several over the counter dips are available to treat infected corals of the Planaria types (AEFW). No in tank treatments known for Polyclads.

Nudibranchs



Fig 4** Photo credit; Melvs Reef

Coral types affected-SPS, LPS, Zoanthids.

Description-Often look as the type of coral they are feasting. Specialized feeders which will eat that specific type of coral. Lays eggs in batches. Small, many of those infesting Montipora are no larger than ¼" with egg pouches being the size of a pinhead.



Fig 5 ** Photo credit; Photobucket

What to look for-It would appear as the coral is dying from a specific area that is growing. Usually hide during the days so break out the flashlight and start looking over the spots at night. Look for circular egg patterns or indiscriminate puffy balls. Zoa Nudis often look like the zoas they are eating.

How to Treat-Dips will kill adults, but eggs will require multiple treatments. Inspect corals, remove bases, and if found a quarantine should be utilized to treat for hatchlings that could emerge. Very hard to get rid of in tank.



Fig 6 ** Photo credit; Coralpedia

Red Bugs



Fig 7** Photo credit: Melvs Reef

Coral types affected-Acropora (SPS)
Description-Literally, little Red Bugs. About the size of a ballpoint pen head, they have little jittery walks. Live bearing so no eggs to look for.
What to look for-recessed polyps as if the coral is annoyed and tissue loss at higher levels of infestation. Will hide in crevices. They do a little bug dance as they walk all over the coral like they are happy after taking a bite or two of some yummy acro. In high concentrations the coral will succumb to the infestation.

How to Treat-Dips will kill adults, but if found a qt regiment would be more ideal as it is rumored, they can hide in the crevices.



Fig 8** Photo credit; Advanced Aquarist

Sea Spiders



Fig 9** Photo credit; Reef Builders

Coral types affected-Acropora (SPS) & Zoanthids

Description-Looks just like a spider. Another critter that is more active at night that will pull an Aliens and face hug your zoas. Others are noted to pester acroporas. Egg layers with males carrying eggs.

What to look for-tissue loss, zoa heads eroding away or closed up with what might appear to be remnants of its skirt still visible (most likely the spiders legs dangling out as is munches on some zoa juice).

How to Treat-Dips will kill adults, but if found a qt regiment would be more ideal, as they do reproduce via eggs. The zoa eating types larvae will hatch and burrow into your zoas. Acro eating types are unknown on their lifecycle currently but would assume the same.



Fig 10** Photo credit; Coral Rx



Fig 11** Photo credit; 3reef

General Livestock



Fig 12** Photo credit; Andaman Snorkel Discovery

Coral types affected-Any and all

Description-Starfish, Fish, Shrimp, Crabs, Anemones, & Corals.

What to look for-Being aware of the type of livestock your introducing. Verify compatibility and think long term. File fish might eat the aptasia, but once gone could eat your anemones. Certain starfish will want to munch on some of those prized corals. Live rock not quarantined and cleansed could introduce undesirable pests you wouldn't want such as crabs which might eat your coral. Wrasses might look cool, but the wrong type might turn your aquascape into a rock flipping contest. Corals can't move so adding anemones to tanks will need to be monitored, that anemone might not like where he's at or decide he wants to split into two. Then you could have them taking a stroll just a stinging and a singing away until it finds the spot it wants to be in, which in my experience never seems to be where I think it would look the coolest in my tank. Coral placement can become a nightmare if they are not monitored and placed in proportion to where you want them to grow, remember they are competing for space and someone will lose out eventually.



Fig 13** Photo credit; Norbert Wu/Minden Pictures

How to Treat-by doing some research and understanding what the species of each selected could have the potential to become long term. Otherwise once the damage ensues, removal will be your best bet.

Unknowns



Fig 13** Photo credit; Member Reef Solution (Reff2Reef)

Coral types affected-As of now Acropora

Description-There're several new superbugs popping up which many are reporting resistant to many of the available dips. Black slug type worms, white pod types, all that have been reported to do untold damage to acropora colonies. To the point of entire tank restarts due to the carnage that has ensued.

What to look for-tissue loss in the form of STN or RTN. Again, a night time issue in which they are more active during that time frame. The black slug types lay eggs around the coral base that look similarly to AEFW, but not as clustered.

How to Treat-Cut bases and dip upon acquisition, inspect for eggs. Certain dips are effective at killing adults, yet eggs will remain, while others have no effect. It is highly recommended to have a qt in place as to not introduce any specimens so further treatment can be administered in the event you bump into anything that doesn't seem normal. There you can witness and treat if necessary or just not even run the risk of introduction period. It would be far better to lose a frag than an entire system.



Fig 14** Photo credit; Member Jrossi86 (Masa.asn.au)

The Unseen-RTN/STN issues

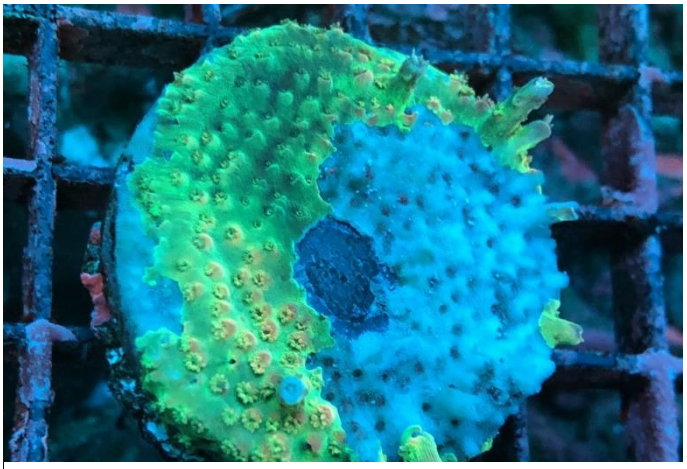


Fig 15** Photo credit; Prime Coral, Dr. Ara Deukmedjian

Coral types affected-ALL

Description-There's still debate as to what the causes of Slow Tissue Necrosis (STN) & Rapid Tissue Necrosis (RTN). Many believe it to be bacterial related stemming from an overabundance of "bad" bacteria outcompeting the good bacteria in a system coupled with a weakened immune system of corals.

Other such as studies by Dr. Ara Deukmedjian have shown a causal relationship between coral tissue necrosis and microscopic protozoan ciliated including Philaster and Euplotes. These are active feeders of coral tissues to the point of plague proportions. Indulging in the zooxanthellan that the corals house.

Of all the "bugs" these cannot be seen with the naked eye but displays itself in the form of tissue lose through RTN or STN.

What to look for-tissue loss in the form of STN or RTN. Appears to attack the weakened corals whose immune system is in decline. Water chemistry changes could trigger an event where the corals system was shocked and as opposed to the coral being able to recover, they succumb to the infestation of the unseen. It's worth noting that previous unknown pests could be associated to the existence of these organisms, similarly to a nassarius snail which scavenges off the carcass of dying snails, fish, clams; the previous mentioned might be doing the same in lieu of the silicates/protozoans decimating the corals

How to Treat- Being it's recently Identified as the possible culprit in STN/RTN there is a limited amount of treatment options available.
For bacterial issues, Iodine dips are commercially available to the trade



Fig 16** Photo credit; Prime Coral, Dr. Ara Deukmedjian

The Hobbyist

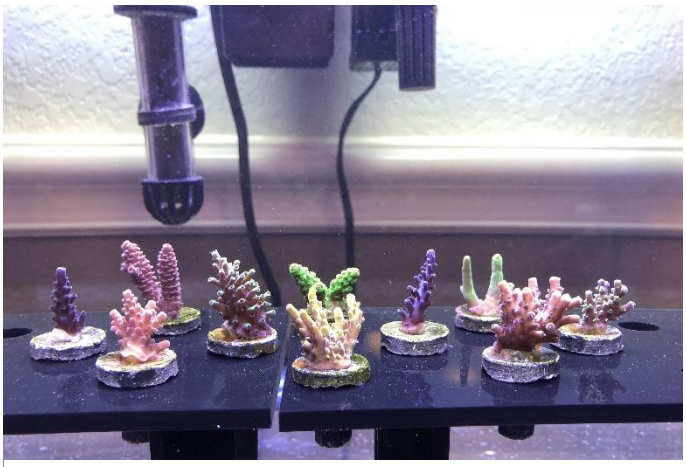


Fig 17** Photo credit; Michael Porter

Coral types affected-ALL

Description-The largest hinder to a reef tanks progress is the person with whom it is in the care of. Lack of monitoring parameters and a lack of knowledgebase can hinder growth. Issues can be fixed and sometimes all it takes is reaching out to people to find a solution. Remember 7% of the ocean has been explored, your community and LFS's share a combined knowledge of experience, and through the love of the hobby can find a solution to help you.

What to look for-Coral health. Swings in parameters. General maintenance.

How to Treat-Being more diligent and informed. When dealing with pests try to identify before if even makes it to your display. Outside of a dip it's highly recommended to have a quarantine system. It can be cheap, easy, and efficient. A 10g tank, not too pricey light (if it turns brown you can get the color back when you get it into the display), heater, and a HOB filter where you can add media for bacteria to hang onto. Add a simple little rack to keep the corals off the ground so you can inspect the bare bottom.



Fig 18** Photo credit; Michael Porter

Even if it's for a couple days, to be able to visually watch it and inspect for anything undesirable could make all the difference in the long run.