

Death Tank

Setting up a tank for some of nature's most dangerous predatory marine fish.

By Scott W. Michael

Q: I am in the process of stocking my new 75-gallon "death tank" that already houses two volitan lionfish, a Hawaiian stonefish and an orange toadfish. I am also looking for a few other "death" fish. I know lions aren't really considered deadly, but they are a fish that people are quite scared of. I keep these fish only because I have an interest in them. Other people say I keep them because I'm an idiot. That only holds a little water.

Now for my question. Are there any really good books dedicated to this family of venomous fishes? And, if so, where can I find them? Thank you for your time.

A: Sounds like you're my kinda fishkeeper! I also love unusual carnivores, like morays, frogfishes and scorpionfishes, so I guess we are both idiots! I don't like to use the term "death fish" because it is a sensationalistic misnomer. Yes, some of the fish in your tank are venomous (although it is highly unlikely that any of them could kill you), and, yes, they all prey on other animals, but so do angelfishes and butterflyfishes! So death fish is too strong a term.

It sounds like you have a pretty good collection of piscivores already. If I were you I might add one or two more fish and call it quits. You might want to add Russell's lionfish (*Pterois russelli*), which is usually sold in the trade as the red volitan lionfish. If this is the species you already have, try the true volitan lionfish (*Pterois volitan*) — usually sold to hobbyists as the black volitan. Or maybe you want to add a "dwarf" species, like a zebra lionfish (*Dendrochirus zebra*) or a shortfin or fuzzy dwarf lionfish (*D. brachypterus*). There are many possibilities.

Make sure any lionfish you add is not small enough to be swallowed by your "Hawaiian stonefish," which is really better known as the diabolical scorpionfish or false stonefish (*Scorpaenopsis diabolus*). The true stonefishes (genus *Synanceia*) do not occur around the Hawaiian Islands. Although the true stonefishes are interesting, they are best avoided because they are so venomous. Although the scorpionfishes you have now can deliver an extremely painful "sting," there is a very slim chance that their venom would kill you. But, the odds of this are greatly increased if you were to be stung by a true stonefish!

Even with the fish you have, you should still be very careful when working in your tank. Do not allow familiarity to lead to recklessness, as is often the case when people get "stung" by their venomous pets. Also, make sure that no young children have access to the tank.

You could also add a smaller species of grouper to your tank. Once again, make sure it is not small enough to be swallowed whole by any of your current aquarium residents, and select a species that will not attain gargantuan proportions!

For example, if you want to add some color, how about a coral hind or miniata grouper (*Cephalopholis miniata*)? Or you might choose a blue-lined hind (*Cephalopholis formosa*) or a leopard hind (*C. leoparda*). In the case of the first two species you may need a larger tank in the future, because these species can attain maximum lengths of over 14 inches. The leopard hind, on the other hand, maxes out at 9½ inches (a better size for a 75-gallon tank). Avoid the giants, like the panther grouper (*Cromileptes altivelis*), the Queensland grouper (*Epinephelus lanceolatus*) and the saddleback coral grouper (*Plectropomus laevis*), for example. These species will outgrow most home aquariums.

One thing you should know before placing a grouper in your tank is that they are very aggressive feeders, and can make getting food to your other fish tricky — at least until the grouper is satiated. A feeding stick can come in very handy to present food to specific fish in the tank. It is possible, although unlikely, that a grouper could accidentally collide with the spines of one of your venomous fishes, which can lead to a nasty sore or lesion, or even death.

I am a big fan of frogfishes as well, but they tend to do better if they are kept in a tank on their own. They are very able and willing to eat other fishes, including venomous varieties, and often stalk their food very slowly. They are, of course, well-known for their modified first dorsal spine, which they use to lure their prey, and are worthy of their own small display tank.

The toadfish you have is the Gulf toadfish (sold in the trade as the orange toadfish — *Opsanus beta*). This fish can get

about 1 foot in length, but rarely exceeds 8 inches. It is usually found in seagrass beds and among rubble and rocks in lagoons, and feeds on small urchins, crustaceans and small bottom-dwelling fishes in the wild.

In order to ensure the long-term maintenance of your predators you must not feed them too much (as is often the temptation, knowing that this is what they do best — eat!). In captivity, many of these fishes eat too much and exercise too little, and excessive amounts of fat end up being deposited around the liver. This will lead to their demise.

Also, make sure you give them a varied diet. Too many people just offer these predators feeder goldfish, which is not a nutritionally sound practice. Try and persuade your fish to eat pieces of seafoods, like marine fish flesh or shelled table shrimp. Rinse the seafood well before feeding, and remove any pieces that are not eaten immediately. Some people also suggest freezing fresh seafood to avoid the introduction of some diseases. If your fish will not take these morsels as they drop to the bottom or as they are pushed through the water column by pump-driven currents, try a feeding stick. Just place the piece of food on the sharpened end of some rigid air line tubing. Then move the food around through the water as if it were alive.

There are no books that are dedicated to these fishes, but there are some that have sections devoted to members of those families containing venomous species. For example, *Fishes of Micronesia* by Rob Myers and *Marine fishes of Tropical Australia and the South-East Pacific* by Gerald Allen have a number of pages dedicated to the scorpionfish family. Most of the books available are guides to a particular geographical area, so they will only discuss those species found in that region and give limited information on aquarium husbandry.

By the end of the year I should have a book out (one of a three-volume set) called *Reef Fishes*. I have extensive chapters in this volume on the scorpionfishes (including one entirely dedicated to lionfishes). The book is being published by Microcosm in Shelburne, Vermont. If you can't find it later this year, let me know and I will help you in acquiring a copy. Best of luck with your carnivorous fishes!