

## Habitat Marine Aquarium

### Setting up a habitat marine aquarium.

*By Jeremy Gosnell*

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This aquarium has a mixture of surgeonfish that would not live together on a natural coral reef. The yellow tangs (*Zebrasoma flavescens*) are found in the South Pacific and the purple tangs (*Zebrasoma xanthurus*) are from the Red Sea. Photo courtesy of Jeremy Gosnell

Q. I would like to start a habitat saltwater aquarium or an aquarium that derives all of its livestock from the same region of the ocean. Do you know the best way to go about this? Many aquariums that I see have animals from different oceans living together. I want an aquarium that represents what would be seen in nature. Any ideas?

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A. It sounds like you're a very thoughtful and eco-conscious person. Many people don't even consider a natural or habitat aquarium when setting up their first saltwater aquarium. Most people, even seasoned aquarists, go online or into a fish outlet and look for the most eye-catching specimen, not even thinking what the animal's origins are or what species may live around it naturally. In my personal saltwater aquarium I have tried to keep only species from the South Pacific. I am certain at least some of my corals and invertebrates likely originated from the Caribbean Sea or Indian Ocean. As you may have guessed, setting up a habitat saltwater aquarium requires far more planning and foresight than an average saltwater aquarium.

It's surprising to note that many public aquariums don't set their saltwater displays up as habitat aquariums. The aquarium where I work as a staff diver has Atlantic blue tangs (*Acanthurus coeruleus*), a Caribbean species swimming right alongside yellow tangs (*Zebrasoma flavescens*) and Achilles tangs (*Acanthurus Achilles*), both South Pacific species.

My first recommendation would be to find a key species. By this I mean one fish that you really want to keep that has not only a look, but also a behavior set that intrigues you. It would be a shame to decide you only want to keep fish originating in the Indian Ocean and then finding out that the species you like the most hails from the Red Sea. Once you have decided on a key species you can then research and find out what ocean or region that fish comes from and see if coral and invertebrates from that area are as interesting. You may find that it's not a fish species that attracts you to a region but a species of coral, gorgonian or crustacean.

Setting up a habitat saltwater aquarium can be a very daunting task. Some folks get down right obsessed when doing this – literally selecting only sand and live rock from a certain region. I would recommend choosing the Caribbean Sea for your first habitat aquarium. When looking at the South Pacific the sheer number of species could be totally overwhelming and trying to research what region each one is from would be a never ending task. To make matters worse, many fish are endemic to certain regions or islands. For example the beautiful dwarf angelfish *Centropyge potteri* or the Potter's angelfish is endemic to the Hawaiian Islands.

While the Caribbean Sea isn't home to nearly as many coral and fish species as the South Pacific, there are still many really amazing choices. For example the queen angelfish (*Holocanthus ciliaris*) is considered by many to be one of the most beautiful fish. The yellowhead jawfish (*Opistognathus aurifrons*) is an amazing small fish that packs a punch in the personality department. Also, the Caribbean is home to a variety of large polyp stony, small polyp stony and soft corals. Using this region of the world's ocean as a template would give you the opportunity to have a truly unique habitat saltwater aquarium.

I think habitat aquariums are a great pursuit. Creating a reefscape that is nearly identical to a natural reef is an exciting yet demanding venture. While your finished product will no doubt be unique, creating your work of art and science will take time and research. Luckily there are online and retail vendors that deal only in Caribbean livestock, so if you take that route you can guarantee the authenticity of your aquarium's residents.