



## Fast Facts for the Invertebrates Aquarium

More than 98% of the one million or more animal species in the world are invertebrates. Invertebrates don't have an internal skeleton made of bone. Instead, many have a fluid-filled hydrostatic skeleton, and others have a hard shell. Insects, worms, jellyfish, starfish, snails and corals are all invertebrates.

Coral reefs are warm, clear and shallow ocean habitats rich in life. They usually occur near land and mostly in the tropics as coral prefer temperatures between 70 and 85 degrees F. Most corals obtain their nutrition by filter feeding and through the photosynthetic algae or *zooxanthellae* that live in coral tissues.

Coral reefs are located off the coast of Florida over to the Caribbean and down to Brazil, off the eastern coast of Africa, off the southern coast of India, in the Red Sea, and off the coasts of northeast and northwest Australia and Polynesia. The Great Barrier Reef off the coast of northeastern Australia, the largest coral reef in the world, is more than 2,000 km (1,257 miles) long.

There are two types of coral: hard and soft. Hard corals, also called hermatypic corals, have rigid, limestone skeletons that form the foundation of coral reefs. Brain coral and elkhorn corals are examples of hard corals. Soft corals, like sea whips and sea fingers, are also known as octocorallia because their polyps have eight tentacles. Soft corals do not build reefs, but they are an important part of a healthy reef ecosystem.

Reef building corals are in danger. Approximately 10% of coral reefs around the world are already dead, according to general estimates. The International Union of Conservation of Nature and Natural Resources (IUCN) reports that of 845 species of reef building corals, 27% are near threatened, 20% are near threatened. Threatened species are considered to be critically endangered, endangered or vulnerable.

Major threats include: water pollution from sewage and agricultural runoff, dredging off the coast, careless collecting of coral specimens and sedimentation (when silt or sand from construction or mining projects muddies the water of a reef).

## Tank Specifications

**Invertebrates Aquarium: A 448-gallon acrylic tank built by Suncoast Aquarium, Inc.**

- Sequence Barracuda pump
- Current/waves produced by Tunze® Wavebox 6212
- One 400-watt 20,000 K metal halide and 4 400-watt 14,000 K metal halide lighting system
- Clearwater 300 mg ozonizer
- Schuran Jetstream 1 calcium reactor
- Current 1HP chiller/heater

## Inhabitants: Coral Reef Fish

This tank features many of the brilliant colored fish you'd see among coral reefs.

***Anthias anthias***, the quintessential "reef fish," are the pink, orange and yellow fishes seen swarming in most coral reef photography and film. They are active, flamboyant schooling fish and travel in "harems." They are also hermaphrodites; if a dominant male dies, the largest female of the group will change into a male to take its place.

Anthias are planktivores and, in the wild, swim in areas of high current and feed on small food particles and animals as they drift by. In the aquarium, they prefer to be fed small quantities, several times a day.

■ **Dispar Anthia (*Pseudoanthia dispar*)**

Males tend to have bright reddish dorsal areas and lack stripes on their tails, while females have yellow-orange dorsal areas and lavender underbellies. This species can grow up to 4 inches in length.

■ **Orange-pink Anthia (*Nemanthias carberryi*)**

Also known as the Threadfin Goldie, this fish has a purple head and abdomen with a yellow back and tail. These fish can grow up to 3 inches in size.

PLEASE DO NOT TAKE 6/09

## Invertebrates Aquarium, cont'd

### ■ Red Coral Perch (*Pseudanthia squamipinnis*)

Also known as a Lyretail Anthias, Sea Fairy Basslet, Sea Goldie and Orange Sea Perch, the Red Coral Perch has an orange/gold body with a violet streak below its eye.

## Other Reef Fish

### ■ Bar Goby (*Ptereleotris zebra*)

A shy fish at first, the Bar Goby will eventually come out of hiding and be friendly. Considered ideal for reef tanks and a favorite peacenic among many marine enthusiasts, it is light green with pink bars on its body, a pink blotch on the gill cover and blue lines on its head. Members of the dartfish family, Bar Gobies are social and get along well in groups and pairs.

### ■ Blue Green Chromis (*Chromis viridis*)

Related to damselfish and clownfish, these fish are less aggressive and like to hang around in schools of three or more. They also school in huge numbers; up to several hundred fish have been seen schooling at a time. In large groups they swim up in the water column, feeding on small particles of suspended food.

### ■ Blue Regal Tang (*Paracanthurus hepatus*)

A beautiful blue fish that flits about the aquarium, the Blue Regal Tang is an active member of the coral reef community. Grazing all day on algae in the wild, we keep our tangs healthy by feeding them copious amounts of vegetable matter daily.

### ■ Fire Goby (*Nemateleotris magnifica*)

Also known as the Firefish, the Fire Goby has a yellow head and a white and pinkish to orangey-red body with black fins. Each Fire Goby will have a "bolthole," which it quickly darts into when threatened. They may, especially when stressed, try to jump out of the tank.

### ■ Giant Clam (*Tridacna spp.*)

These are the largest mollusks on earth growing up to 4 ft. in length and weighing more than 500 lbs. They achieve their enormous size by consuming the sugars and proteins produced by billions of algae that live in their tissues.

### ■ Kole Tang (*Ctenochaetus strigosus*)

In Ancient Hawaiian times, the Kole Tang was considered royal food and "kapu" or forbidden to be caught or eaten by anyone except the Royal Family. The penalty? Death.

### ■ Lawnmower Blenny (*Salarias fasciatus*)

A very small version of your home lawnmower, this fish has an appetite for algae and literally mows it right down to the rock with its rasping bites! Get a good look at this one; it has a lot of character!

### ■ Skunk Cleaner Shrimp (*Lysmata amboinensis*)

The most popular of all the popular shrimps, the Skunk Cleaner Shrimp has a stripe down its back. It is not a slacker and works on fish any time it gets the chance! They're known to climb on fish and go for a ride, hanging on and cleaning as the fish go about their business.

### ■ Yellow Tang (*Zebrasoma flavescens*)

A brilliant yellow disc-shaped fish (also known as "Bubbles" from *Finding Nemo*), the Yellow Tang is one of the only full color species of the surgeonfish family. Sharp spines positioned on each side of the body look like scalpels.

## Inhabitants: Coral Species

### ■ Acropora (*Acropora spp.*)

Usually positioned toward the top of the aquarium under the brightest light, *Acropora* corals are branching beauties. It is easy to see the individual bumps on the branches (called corallites) occupied by each polyp. Varieties of *Acropora* encompass every color of the rainbow – from dark blues and purples to vibrant greens and yellows.

### ■ Montipora (*Montipora spp.*)

Growing in semi-flat sheets of greens, browns and oranges, this coral, though looking much like rock, is a live organism! A coral is composed of colonies of thousands of tiny, living organisms called polyps. Take a close look at the *Montipora*: The purplish or whitish coloration to the plates is actually new coral growth!