## Acanthastrea

Class Anthozoa, Subclass Hexacorallia, Order Scleractinia, Family Mussidea, Genera Acanthastrea





photo by Robert Pacheco

Common names: moon coral, acan Natural origin: Indo-Pacific

Sensitivity (Level 2): Care difficulty for these corals depends on species, but most are generally tolerant and forgiving when healthy. Feeding: These corals have strong prey capture ability. In addition to feeding tentacles, these corals are also known to extend their stomachs, mesenterial filament bundles which dissolve and digest their neighbors. They should be fed at night since this is when they usually extend their feeder tentacles and/or mesenterial filaments. If after several weeks your coral is still not extending feeder tentacles, you can try to encourage a feeding response with nighttime target feeding. When doing this, wait one hour after lights go off before feeding. Turn water flow off so that the food can fall and rest onto the coral. Give the coral an hour or two to "grab hold" of the food, then turn water flow back on. Do this regularly until feeder tentacles extend regularly in anticipation of feeding. Once your coral is readily extending feeding tentacles, it will be able to catch food from the current without any assistance. **Lighting (Level 3 to 6):** These corals can adapt to a wide range of light intensities. Start by placing the coral lower down in the tank and move up if necessary. As with any coral, bleaching can occur if not properly acclimated to a sudden change in lighting.

Water flow: Moderate water flow is recommended.

Placement: These are very aggressive corals. Their mesenterial filaments can and will dissolve the tissues of other corals within reach, so please give them plenty of space to avoid contact with other corals.

**General:** Like many corals, they can take some time to "settle in" to a new home. Wait a few weeks to see normal feeding behavior before worrying.

These corals are often confused for corals of the Faviidae family or for their *Blastomussa* and *Micromussa* cousins. *Acanthastrea* have exceptionally large, pointy septa (skeletal "teeth") that help distinguish them from other corals. However, you may never know exactly which kind coral you have without close examination of the coral skeleton.



Level 0 - no light

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**Level 3** - one foot below modest VHO or T5 fluorescent lighting

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**Level 5** - two feet below extensive VHO or T5 fluorescent lighting

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**Level 6** - one foot below extensive VHO or T5 fluorescent lighting

**Level 7** - two feet below 250 watt single ended MH light (or 150-175 watt MH with HQI ballast)

**Level 8** - one foot below 250 watt single ended MH light (or 150-175 watt MH with HQI ballast)

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**Level 10** - one foot below 400 watt single ended MH (or 250 watt MH with HQI ballast)

Note that this scale is quite crude and only meant to provide a rough idea of the different levels of light intensities. How much (and what kind of) light actually reaches the corals in your tank also depends on the type of reflector in the light fixture, the temperature of the bulbs/lamps, the clarity of your tank water, etc.

## Sensitivity:

**Level 1** - These corals are easy to care for, good for the novice aquarists.

**Level 2** - These corals require slightly more attention than level 1 corals, but are generally tolerant and forgiving.

**Level 3** - These corals require stable, established aquariums and care by an experienced aquarist.

**Level 4** - These corals should only be kept by the most experienced aquarists.

**Level 5** - These corals are not known to be able to survive in aquariums even when under the care of the most experienced aquarists

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It's also important to note that different individual corals, even of the same species, can have very different lighting requirements and ideals. Often times, the same types and species of wild caught corals come from different depths and different water clarities. It's nearly impossible to know what kind or how much light was getting to your coral when it was first taken from the wild. One advantage of aquacultured corals is that you can know what light they were grown under. Beyond health, the color of any given zooxanthellate (photosynthetic) coral will change and adapt in response to the lighting it is placed under. All corals are vulnerable to bleaching if not allowed to acclimate to a change to more intense lighting. If your coral begins to bleach, move it to an area of lower lighting and feed it especially well.

#### **Acclimation:**

Please, always take the time to acclimate new corals.

**Step 1:** Float the bag with the coral in the aguarium water (away from lights!) for about 20 minutes.

**Step 2:** Open the bag and test the salinity of the bag water.

**Step 3:** Add about 1/3 to 1/2 cup of tank water to the bag every 10-20 minutes until the bag water and tank water are approximately the same salinity. You can add less water over longer periods of time to acclimate more slowly for more sensitive animals (or when the bag water and tank water have substantially different salinity).

Acclimation can also be done in a bucket (rather than the transport bag). However, the bucket water temperature can get closer to room temperature than tank water temperature (especially for slow acclimations). Insulating the bucket in a Styrofoam box or cooler during acclimation should help. To acclimate to new lighting conditions, first place the coral in a less light intense area of the tank. Every few days, move the coral towards more direct lighting until it is where you want it to be. If it begins to bleach at any point, move it back to a less light intense area. After the coral recovers, commence moving towards more direct light more slowly.

#### General "Disclaimer"

# Acropora

Class Anthozoa, Subclass Hexacorallia, Order Scleractinia, Family Acroporidae, Genus Acropora







top two photos by Mike LaPorte bottom photo by Gene Schwartz

**Common names:** staghorn coral, table coral, branching or plating *Acropora* 

Natural origin: Indo-Pacific, Caribbean

Sensitivity (Level 3 to 4): *Acropora* species are relatively intolerant of unstable and less than ideal conditions. Sensitivity varies widely depending on the particular species and whether wild or aquacultured. To increase chances of success, do not attempt to *Acropora* them in tanks less than a year old. Significant fluctuations in temperature and/or water quality can be deadly.

**Feeding:** These corals have small polyps and poor prey capture ability. They consume foods of very small particle size. For example, oyster eggs, with a particle size of about  $50\mu$ , are a good food for these corals. In a well fed tank with a variety of food, additional feeding might not be necessary.

**Lighting (Level 7 to 10):** Though adaptable, *Acropora spp.* tend to grow faster and fair better under more intense lighting. The ideal lighting for any particular coral will depend on the species and/or the depth and clarity of the water where it was collected or cultured. As with any zooxanthellate coral, coloration can change in response to changing lighting conditions. And as always, sudden changes in lighting conditions can result in bleaching. Be sure to acclimate properly.

Water flow: Acropora spp. need strong, turbulent water for effective feeding, good health and to prevent sediment damage. Place these corals in the highest area of water flow in the tank. Placement: Place safely away from aggressive corals and be careful of fast-growing encrusting corals that will compete for space.

General: *Acropora spp.* are often vulnerable to disease and predation by certain species of coral-eating flatworms, nudibranches, and tiny crustaceans called "red bugs." To prevent an infestation, carefully inspect and quarantine all new corals for 2 to 3 weeks before allowing them into the main tanks. Steady, healthy calcium (400 to 450 ppm) and alkalinity (3.0 to 4.5 meq/L) levels are important for coral health and growth.



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## Sensitivity:

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**Level 2** - These corals require slightly more attention than level 1 corals, but are generally tolerant and forgiving.

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It's also important to note that different individual corals, even of the same species, can have very different lighting requirements and ideals. Often times, the same types and species of wild caught corals come from different depths and different water clarities. It's nearly impossible to know what kind or how much light was getting to your coral when it was first taken from the wild. One advantage of aquacultured corals is that you can know what light they were grown under. Beyond health, the color of any given zooxanthellate (photosynthetic) coral will change and adapt in response to the lighting it is placed under. All corals are vulnerable to bleaching if not allowed to acclimate to a change to more intense lighting. If your coral begins to bleach, move it to an area of lower lighting and feed it especially well.

#### **Acclimation:**

Please, always take the time to acclimate new corals.

**Step 1:** Float the bag with the coral in the aguarium water (away from lights!) for about 20 minutes.

**Step 2:** Open the bag and test the salinity of the bag water.

**Step 3:** Add about 1/3 to 1/2 cup of tank water to the bag every 10-20 minutes until the bag water and tank water are approximately the same salinity. You can add less water over longer periods of time to acclimate more slowly for more sensitive animals (or when the bag water and tank water have substantially different salinity).

Acclimation can also be done in a bucket (rather than the transport bag). However, the bucket water temperature can get closer to room temperature than tank water temperature (especially for slow acclimations). Insulating the bucket in a Styrofoam box or cooler during acclimation should help. To acclimate to new lighting conditions, first place the coral in a less light intense area of the tank. Every few days, move the coral towards more direct lighting until it is where you want it to be. If it begins to bleach at any point, move it back to a less light intense area. After the coral recovers, commence moving towards more direct light more slowly.

#### General "Disclaimer"

## Blastomussa & Micromussa

Class Anthozoa, Order Scleractinia, Family Mussidea, Genera Blastomussa and Micromussa





top photo by Mike LaPorte bottom photo by Jason Huber

Common names: pineapple coral Natural origin: Indo-Pacific

**Sensitivity (Level 2):** Care difficulty for these corals depends on species, but most are tolerant and forgiving when healthy.

**Feeding:** These corals have good prey capture ability and can feed on a variety of meaty aquarium foods. Smaller chunked meaty foods are preferred. They sometimes look like colonial anemones when their feeding tentacles are fully expanded.

**Lighting (Level 3 to 6):** Though they can adapt to a wide range of light intensities, these corals don't seem to appreciate lighting that is too intense. Indirect or less intense light is preferred. As with any coral, they can bleach if not properly acclimated.

Water flow: Moderate water flow is recommended. Placement: These are peaceful corals. Place safely away from aggressive tank mates. Most are not great competitors for space and will lose battles for space with more aggressive or faster growing corals.

**General:** Some species (such as *Blastomussa merleti*) have long, pipe-like polyp skeletons (corallites) that connect at the base of the colony. These types of skeletal structures allow for easy breaking off of single polyps or small polyp clusters. This makes fragmentation and propagation easy.



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#### General "Disclaimer"

## **Carnation Coral**

Class Anthozoa, Subclass Alcyonaria, Class Alcyonacea, Family Nephtheidae, Genus Dendronephthya



photo by Mohammed Al Momany

Common names: carnation corals, cauliflower corals, tree corals

Natural origin: Indo-Pacific

**Sensitivity (Level 5):** These soft corals do not survive long in aquariums. Even the most experienced aquarists find them nearly impossible to keep alive for very long.

**Feeding:** They are azooxanthellate corals with exceptionally heavy feeding requirements. This demanding feeding requirement is probably why they don't survive long in aquariums. Heavy feeding of phytoplankton and very fine particle foods in tanks with large, well-populated sand beds may help delay death. However, even with the most ambitious efforts, they almost always perish within less than a year.

**Lighting (Level 0 to 6):** These corals don't need light. Too much light can be detrimental.

Water flow: Strong, alternating, laminar water flow is crucial.

**Placement:** Contrary to how most aquarists place them, in the wild, they are usually found growing "up-side down," hanging off rock ledges.

General: Unless you are an exceptionally experienced aquarist wishing to do some thoughtful experimenting, please do not purchase these corals. Even science is not entirely sure of their nutritional needs or what all they feed on in the wild.



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#### **Acclimation:**

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#### General "Disclaimer"



# Catalaphyllia (Elegance Coral)

Class Anthozoa, Subclass Hexacorallia, Order Scleractinia, Family Euphyllidae, Genus Catalaphyllia





top photo by Mike Cole bottom photo by Gene Schwartz

Common names: elegance coral Natural origin: Indo-Pacific

Sensitivity (Level 4 to 5): While these corals were once considered generally tolerant and easy to care for they have recently been suffering from a fatal epidemic of a highly infectious disease of unknown type or cause. Symptoms of the disease are very short tentacles and a swollen polyp body. Feeding: Elegance corals have strong prey capture ability and can feed on mysis shrimp and other meaty marine aquarium foods.

Lighting (5 to 8): They can adapt to a range of light intensities but seem to prefer moderate to stronger lighting. Water flow: Place this coral an area of moderate water flow. Placement: Aggressive corals, they are best placed on a sand bed or other soft bottom with enough room for the long tentacles to fully extend without touching rocks or other corals. Do not keep with leather corals.

**General:** The disease these corals have been suffering from is characterized by a swollen polyp body, short stubby tentacles, and lack of normal behavior. It is not wise to purchase a coral appearing to be infected. Even if a healthy appearing elegance is purchased, the coral should be quarantined for several weeks (or even months) to ensure that it has not been infected.



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#### General "Disclaimer"

## Caulastrea

Class Anthozoa, Order Scleractinia, Family Faviidae, Genus Caulastrea





photo by Mike LaPorte photo by Gene Schwartz

**Common Names:** torch coral, candy cane coral, candy coral, trumpet coral, bullseye coral, cat's eye coral

Natural Origin: Indo-Pacific

**Sensitivity (Level 1 to 2):** Though sensitivity will depend somewhat on the individual coral, most are quite tolerant and forgiving.

Feeding: These corals have impressive prey capture ability. They should be fed a variety of meaty sea foods (chopped fish, squid, krill, brine shrimp, etc.) If the coral seems reluctant to fully display feeding tentacles, a few weeks of careful target feeding may help. While target feeding, turn off circulation so that the food can fall onto the coral. Give the coral an hour or two to "grab hold" of the food, then turn water flow back on. Doing this for a few days should result in the he coral regularly extending its feeding tentacles in anticipation of feeding.

**Lighting (Level 5 to 7):** Appropriate lighting depends on the species, but most prefer moderate lighting. Animals from deeper water may suffer under really intense light. If your coral begins to bleach, try moving it to a less intensely lit area of the tank.

Water flow: Moderate water flow is preferred.

**Placement:** Caulastrea are very aggressive corals. They can extend stinging sweeper tentacles up to several inches long. Please place with care.

**General:** When healthy and well fed, these corals can grow quite quickly. Colonies of several polyps are especially easy to fragment and propagate.

Slow tissue recession could be a sign of starvation. Regular target feeding might help if this is the case.



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#### General "Disclaimer"

## **Clove Coral**

Class Anthozoa, Order Alcyonacea, Family Clavulariidae, Genera Cornularia and Clavularia





Common names: clove polyp coral, clove coral, eight

tentacle polyps

Natural origin: Indo-Pacific

Sensitivity (Level 1): These are usually very tolerant and

forgiving corals.

**Feeding:** The coral's feathery polyp tentacles help it catch food suspended in water. They feed on foods of smaller particle size.

**Lighting (Level 4 to 7):** Lighting needs will depend on the depth and clarity of the water where the coral was collected (or aquacultured). However, most prefer moderate lighting. **Water flow:** Moderate water flow is important for good health.

**Placement:** These corals can be slightly aggressive, but the stinging power of their polyps is minimal. When healthy, they can grow quite quickly and should be provided space to grow and fully extend their polyps. An encrusting coral with tubular shaped polyps, clove corals can grow quite fast and compete with other corals for space (like xenia and star polyps they can become a "weed coral"). Polyps usually range in height from 1/2 to 2 inches when closed, and 1 to 4 inches when fully extended.

**General:** These are great beginner corals and very easy to fragment and propagate.



Level 0 - no light

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**Level 3** - one foot below modest VHO or T5 fluorescent lighting

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**Level 5** - two feet below extensive VHO or T5 fluorescent lighting

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**Level 6** - one foot below extensive VHO or T5 fluorescent lighting

**Level 7** - two feet below 250 watt single ended MH light (or 150-175 watt MH with HQI ballast)

**Level 8** - one foot below 250 watt single ended MH light (or 150-175 watt MH with HQI ballast)

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**Level 10** - one foot below 400 watt single ended MH (or 250 watt MH with HQI ballast)

Note that this scale is quite crude and only meant to provide a rough idea of the different levels of light intensities. How much (and what kind of) light actually reaches the corals in your tank also depends on the type of reflector in the light fixture, the temperature of the bulbs/lamps, the clarity of your tank water, etc.

## Sensitivity:

**Level 1** - These corals are easy to care for, good for the novice aquarists.

**Level 2** - These corals require slightly more attention than level 1 corals, but are generally tolerant and forgiving.

**Level 3** - These corals require stable, established aquariums and care by an experienced aquarist.

**Level 4** - These corals should only be kept by the most experienced aquarists.

**Level 5** - These corals are not known to be able to survive in aquariums even when under the care of the most experienced aquarists

Note that this scale is not set in stone, but based on the numerous experiences and reports of professional and hobby aquarists. The sensitivity and tolerance of any given coral in your tank will depend on species, health when collected/purchased, how long it's been in captivity, and other factors that may or may not be knowable.

It's also important to note that different individual corals, even of the same species, can have very different lighting requirements and ideals. Often times, the same types and species of wild caught corals come from different depths and different water clarities. It's nearly impossible to know what kind or how much light was getting to your coral when it was first taken from the wild. One advantage of aquacultured corals is that you can know what light they were grown under. Beyond health, the color of any given zooxanthellate (photosynthetic) coral will change and adapt in response to the lighting it is placed under. All corals are vulnerable to bleaching if not allowed to acclimate to a change to more intense lighting. If your coral begins to bleach, move it to an area of lower lighting and feed it especially well.

#### **Acclimation:**

Please, always take the time to acclimate new corals.

**Step 1:** Float the bag with the coral in the aguarium water (away from lights!) for about 20 minutes.

**Step 2:** Open the bag and test the salinity of the bag water.

**Step 3:** Add about 1/3 to 1/2 cup of tank water to the bag every 10-20 minutes until the bag water and tank water are approximately the same salinity. You can add less water over longer periods of time to acclimate more slowly for more sensitive animals (or when the bag water and tank water have substantially different salinity).

Acclimation can also be done in a bucket (rather than the transport bag). However, the bucket water temperature can get closer to room temperature than tank water temperature (especially for slow acclimations). Insulating the bucket in a Styrofoam box or cooler during acclimation should help. To acclimate to new lighting conditions, first place the coral in a less light intense area of the tank. Every few days, move the coral towards more direct lighting until it is where you want it to be. If it begins to bleach at any point, move it back to a less light intense area. After the coral recovers, commence moving towards more direct light more slowly.

#### General "Disclaimer"

# Corallimorphia (Ricordia and mushrooms)

Class Anthozoa, Suborder Hexacorallia, Order Corallimorpharia, Family Ricordeidae and Genus Discosoma



**Common names:** Ricordia, mushrooms, button polyps, hairy mushrooms

Natural origin: Indo-Pacific, Caribbean

Sensitivity (Level 1 to 2): Sensitivity varies some from species to species, but usually tolerant and quite forgiving. When healthy, these corals can rapidly recover from damage and stress.

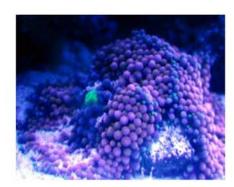
**Feeding:** Prey capture ability depends on species and size of the coral polyp mouth. If the tank is regularly fed a healthy variety of food, these corals should have no problem getting what they need.

**Lighting (Level 2 to 8):** Most can adapt to a wide range of light intensities but sudden changes in lighting can cause bleaching.

Water flow: These corals can thrive in lower flow areas of the tank.

**Placement:** Though they're not generally aggressive, they can be quite unyielding. A few species can grow quite large (reaching over a foot in diameter) while some species stay relatively small (less than 2 inches across). The larger species include many of the corals commonly referred to as "hairy mushrooms." All species divide as a method of asexual reproduction.

General: Note that these corals will sometimes detach from their rocks and float away. This could be a sign that they are unhealthy or over crowded. However, it could also mean that they are not happy with where they are in the tank and are simply trying to find a more favorable spot. You can try to glue the coral down, but this can be quite difficult if there are grains of sand attached to the foot. It's usually wiser or kinder to just let the coral find the spot it wants. Just make sure that as it ventures around it doesn't get stuck in an obviously bad place (such as in the grate of an overflow or powerhead, or at the base of an incompatible coral). These corals can be fragmented by cutting into sections.





bottom photo by Mike LaPorte middle photo by Carole Jurrens top photo by April



Level 0 - no light

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**Level 3** - one foot below modest VHO or T5 fluorescent lighting

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**Level 5** - two feet below extensive VHO or T5 fluorescent lighting

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**Level 6** - one foot below extensive VHO or T5 fluorescent lighting

**Level 7** - two feet below 250 watt single ended MH light (or 150-175 watt MH with HQI ballast)

**Level 8** - one foot below 250 watt single ended MH light (or 150-175 watt MH with HQI ballast)

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**Level 10** - one foot below 400 watt single ended MH (or 250 watt MH with HQI ballast)

Note that this scale is quite crude and only meant to provide a rough idea of the different levels of light intensities. How much (and what kind of) light actually reaches the corals in your tank also depends on the type of reflector in the light fixture, the temperature of the bulbs/lamps, the clarity of your tank water, etc.

## Sensitivity:

**Level 1** - These corals are easy to care for, good for the novice aquarists.

**Level 2** - These corals require slightly more attention than level 1 corals, but are generally tolerant and forgiving.

**Level 3** - These corals require stable, established aquariums and care by an experienced aquarist.

**Level 4** - These corals should only be kept by the most experienced aquarists.

**Level 5** - These corals are not known to be able to survive in aquariums even when under the care of the most experienced aquarists

Note that this scale is not set in stone, but based on the numerous experiences and reports of professional and hobby aquarists. The sensitivity and tolerance of any given coral in your tank will depend on species, health when collected/purchased, how long it's been in captivity, and other factors that may or may not be knowable.

It's also important to note that different individual corals, even of the same species, can have very different lighting requirements and ideals. Often times, the same types and species of wild caught corals come from different depths and different water clarities. It's nearly impossible to know what kind or how much light was getting to your coral when it was first taken from the wild. One advantage of aquacultured corals is that you can know what light they were grown under. Beyond health, the color of any given zooxanthellate (photosynthetic) coral will change and adapt in response to the lighting it is placed under. All corals are vulnerable to bleaching if not allowed to acclimate to a change to more intense lighting. If your coral begins to bleach, move it to an area of lower lighting and feed it especially well.

#### **Acclimation:**

Please, always take the time to acclimate new corals.

**Step 1:** Float the bag with the coral in the aguarium water (away from lights!) for about 20 minutes.

**Step 2:** Open the bag and test the salinity of the bag water.

**Step 3:** Add about 1/3 to 1/2 cup of tank water to the bag every 10-20 minutes until the bag water and tank water are approximately the same salinity. You can add less water over longer periods of time to acclimate more slowly for more sensitive animals (or when the bag water and tank water have substantially different salinity).

Acclimation can also be done in a bucket (rather than the transport bag). However, the bucket water temperature can get closer to room temperature than tank water temperature (especially for slow acclimations). Insulating the bucket in a Styrofoam box or cooler during acclimation should help. To acclimate to new lighting conditions, first place the coral in a less light intense area of the tank. Every few days, move the coral towards more direct lighting until it is where you want it to be. If it begins to bleach at any point, move it back to a less light intense area. After the coral recovers, commence moving towards more direct light more slowly.

#### General "Disclaimer"



# Euphyllia (Hammer, Torch and Fox Corals)

Class Anthozoa, Order Scleractinia, Family Euphyllidae, Genera Euphyllia and Nemenzophyllia







Common names: hammer coral, branched hammer coral, torch coral, pom-pom coral, whisper coral, fox coral Natural origin: Indo-Pacific

**Sensitivity (Level 2):** Though generally tolerant, they need to be fed and placed properly (see below).

Feeding: These corals have good prey capture ability and can feed on mysis shrimp and other meaty marine foods. Lighting (Level 5 to 7): Preferred lighting depends on species, but most prefer moderate (or intense but indirect) lighting.

Water flow: Place in an area of moderate water flow. Placement: These corals can be quite aggressive, displaying long, powerful stinging sweeper tentacles. Please place them safety away from other corals. Do not keep with leather corals that may be toxic to larger polyped stony corals. Also avoid housing with hermit crabs.

General: If not otherwise explained, slow tissue recession may be a sign of starvation. Target feeding may help this situation. These corals seem to be more susceptible to brown jelly disease than most other corals. To help prevent disease, be careful not to damage the coral while handling and avoid housing with hermit crabs that can irritate the coral's soft tissue.



top hoto by Mike LaPorte last two photos by Charlie Ehlers



Level 0 - no light

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**Level 3** - one foot below modest VHO or T5 fluorescent lighting

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**Level 5** - two feet below extensive VHO or T5 fluorescent lighting

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**Level 6** - one foot below extensive VHO or T5 fluorescent lighting

**Level 7** - two feet below 250 watt single ended MH light (or 150-175 watt MH with HQI ballast)

**Level 8** - one foot below 250 watt single ended MH light (or 150-175 watt MH with HQI ballast)

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**Level 10** - one foot below 400 watt single ended MH (or 250 watt MH with HQI ballast)

Note that this scale is quite crude and only meant to provide a rough idea of the different levels of light intensities. How much (and what kind of) light actually reaches the corals in your tank also depends on the type of reflector in the light fixture, the temperature of the bulbs/lamps, the clarity of your tank water, etc.

## Sensitivity:

**Level 1** - These corals are easy to care for, good for the novice aquarists.

**Level 2** - These corals require slightly more attention than level 1 corals, but are generally tolerant and forgiving.

**Level 3** - These corals require stable, established aquariums and care by an experienced aquarist.

**Level 4** - These corals should only be kept by the most experienced aquarists.

**Level 5** - These corals are not known to be able to survive in aquariums even when under the care of the most experienced aquarists

Note that this scale is not set in stone, but based on the numerous experiences and reports of professional and hobby aquarists. The sensitivity and tolerance of any given coral in your tank will depend on species, health when collected/purchased, how long it's been in captivity, and other factors that may or may not be knowable.

It's also important to note that different individual corals, even of the same species, can have very different lighting requirements and ideals. Often times, the same types and species of wild caught corals come from different depths and different water clarities. It's nearly impossible to know what kind or how much light was getting to your coral when it was first taken from the wild. One advantage of aquacultured corals is that you can know what light they were grown under. Beyond health, the color of any given zooxanthellate (photosynthetic) coral will change and adapt in response to the lighting it is placed under. All corals are vulnerable to bleaching if not allowed to acclimate to a change to more intense lighting. If your coral begins to bleach, move it to an area of lower lighting and feed it especially well.

#### **Acclimation:**

Please, always take the time to acclimate new corals.

**Step 1:** Float the bag with the coral in the aguarium water (away from lights!) for about 20 minutes.

**Step 2:** Open the bag and test the salinity of the bag water.

**Step 3:** Add about 1/3 to 1/2 cup of tank water to the bag every 10-20 minutes until the bag water and tank water are approximately the same salinity. You can add less water over longer periods of time to acclimate more slowly for more sensitive animals (or when the bag water and tank water have substantially different salinity).

Acclimation can also be done in a bucket (rather than the transport bag). However, the bucket water temperature can get closer to room temperature than tank water temperature (especially for slow acclimations). Insulating the bucket in a Styrofoam box or cooler during acclimation should help. To acclimate to new lighting conditions, first place the coral in a less light intense area of the tank. Every few days, move the coral towards more direct lighting until it is where you want it to be. If it begins to bleach at any point, move it back to a less light intense area. After the coral recovers, commence moving towards more direct light more slowly.

#### General "Disclaimer"



# Favia and Favites (and other moon corals)

Class Anthozoa, Order Scleractinia, Family Faviidae, Genera Favia and Favites





Common names: moon coral, brain coral

Natural origin: Indo-Pacific

Sensitivity (Level 1 to 2): Sensitivity depends a bit on the species, but most are quite tolerant, forgiving and easy to care for.

Feeding: Most species have considerable prev capture ability. All

Feeding: Most species have considerable prey capture ability. All have feeder tentacles. However, like many corals, they can take some time to "settle in" to a new home. They should be fed at night since this is when they will usually extend their feeder tentacles. If after several weeks your coral is still not extending feeder tentacles, you can try to encourage a feeding response with night-time target feeding. When doing this, wait one hour after lights go off before feeding. Turn water flow off so that the food can fall and rest onto the coral. Give the coral an hour or two to "grab hold" of the food, then turn water flow back on. Do this regularly until feeder tentacles extend regularly in anticipation of feeding. Once your coral is readily extending feeding tentacles, it will be able to catch food from the current without any assistance. Lighting (Level 4 to 7): These corals can adapt to a range of light intensities. Like any coral, they can bleach if not properly acclimated to a sudden change in lighting.

Water flow: Moderate to strong water flow is best. Stronger water flow may help encourage feeding tentacle extension.

Placement: These corals seem to do best when placed on a hard surface or up on rocks (sand can cause some irritation). Aggression varies considerably between species. Some have sweeper tentacles (stinging tentacles that can extend several inches), but some don't. Don't assume that your coral does not have sweeper tentacles just because you haven't seen them. They may only extend them at night or when you haven't been watching. General: This is a huge group of corals including the Favid and Favites genera. They are often confused with Blastomussa, Micromussa, Acanthastrea and other similar appearing corals. If not otherwise explained, slow tissue recession may be a sign of starvation. Careful target feeding as described previously may help this situation.



Level 0 - no light

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**Level 3** - one foot below modest VHO or T5 fluorescent lighting

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**Level 5** - two feet below extensive VHO or T5 fluorescent lighting

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**Level 6** - one foot below extensive VHO or T5 fluorescent lighting

**Level 7** - two feet below 250 watt single ended MH light (or 150-175 watt MH with HQI ballast)

**Level 8** - one foot below 250 watt single ended MH light (or 150-175 watt MH with HQI ballast)

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**Level 10** - one foot below 400 watt single ended MH (or 250 watt MH with HQI ballast)

Note that this scale is quite crude and only meant to provide a rough idea of the different levels of light intensities. How much (and what kind of) light actually reaches the corals in your tank also depends on the type of reflector in the light fixture, the temperature of the bulbs/lamps, the clarity of your tank water, etc.

## Sensitivity:

**Level 1** - These corals are easy to care for, good for the novice aquarists.

**Level 2** - These corals require slightly more attention than level 1 corals, but are generally tolerant and forgiving.

**Level 3** - These corals require stable, established aquariums and care by an experienced aquarist.

**Level 4** - These corals should only be kept by the most experienced aquarists.

**Level 5** - These corals are not known to be able to survive in aquariums even when under the care of the most experienced aquarists

Note that this scale is not set in stone, but based on the numerous experiences and reports of professional and hobby aquarists. The sensitivity and tolerance of any given coral in your tank will depend on species, health when collected/purchased, how long it's been in captivity, and other factors that may or may not be knowable.

It's also important to note that different individual corals, even of the same species, can have very different lighting requirements and ideals. Often times, the same types and species of wild caught corals come from different depths and different water clarities. It's nearly impossible to know what kind or how much light was getting to your coral when it was first taken from the wild. One advantage of aquacultured corals is that you can know what light they were grown under. Beyond health, the color of any given zooxanthellate (photosynthetic) coral will change and adapt in response to the lighting it is placed under. All corals are vulnerable to bleaching if not allowed to acclimate to a change to more intense lighting. If your coral begins to bleach, move it to an area of lower lighting and feed it especially well.

#### **Acclimation:**

Please, always take the time to acclimate new corals.

**Step 1:** Float the bag with the coral in the aguarium water (away from lights!) for about 20 minutes.

**Step 2:** Open the bag and test the salinity of the bag water.

**Step 3:** Add about 1/3 to 1/2 cup of tank water to the bag every 10-20 minutes until the bag water and tank water are approximately the same salinity. You can add less water over longer periods of time to acclimate more slowly for more sensitive animals (or when the bag water and tank water have substantially different salinity).

Acclimation can also be done in a bucket (rather than the transport bag). However, the bucket water temperature can get closer to room temperature than tank water temperature (especially for slow acclimations). Insulating the bucket in a Styrofoam box or cooler during acclimation should help. To acclimate to new lighting conditions, first place the coral in a less light intense area of the tank. Every few days, move the coral towards more direct lighting until it is where you want it to be. If it begins to bleach at any point, move it back to a less light intense area. After the coral recovers, commence moving towards more direct light more slowly.

#### General "Disclaimer"

# **Fungiidae**

Class Anthozoa, Order Scleractinia, Family Fungiidae, Genera Heliofungia, Fungia, Polyphyllia, and Lithophyllon





bottom photo by Jason Huber

Common names: disc coral, plate coral, tongue coral, fungia, mushroom coral

Natural origin: Indo-Pacific

Sensitivity (Level 1 to 3): Sensitivity depends on genus and species. Species from the genus *Fungia* are generally tolerant and tend to have excellent success rates among aquarists. *Heliofungia* species (often distinguished by their long tentacles) have a reputation for being much harder to care for and experience relatively poor success rates in aquaria. **Feeding:** These corals have strong prey capture ability and

can feed on chunky, meaty marine foods. The size of the food should fit the size of the coral's polyp mouth or mouths. **Lighting (Level 5 to 8):** These corals can adapt to a range of lighting conditions, but most need at least moderate lighting for good health and growth. As always, proper acclimation to new lighting conditions is important.

Water flow: They do well in areas of moderate water flow. Placement: These corals should be placed on a flat surface (sand beds are usually best, but gravel and bare bottoms will do). They can be a bit aggressive, so please give a little room. General: These corals can be quite dynamic. They can move independently across flat surfaces (even up to several inches overnight) and can sometimes even flip themselves over after falling upside down. Tentacles usually come out at night, but in captivity they can come out during the day too (or instead). In healthy tanks, they can show remarkable recovery from injury or disease. They're also known for occasionally producing babies called "anthocauli" upon their death.

## Galaxea

Class Anthozoa, Order Scleractinia, Family Oculinidae, Genus Galaxea



photo by Mike LaPorte

Common names: galaxea Natural origin: Indo-Pacific

Sensitivity (Level 2 to 3): Though not beginner corals, they're generally tolerant in healthy, established aquariums. Feeding: These corals should be fed a variety of smaller particle food.

**Lighting (Level 3 to 5):** They can adapt to a range of lighting conditions and seem to do well under less intense light. As always, care should be taken to acclimate the coral to any change in lighting conditions.

Water flow: They do best with surging water flow. If surging flow is not available, place in an area of the tank with stronger, more turbulent flow.

**Placement:** These corals can get quite aggressive with their exceptionally long stinging sweeper tentacles. Even small colonies need a lot of room.

General: Galaxea have thin, fragile polyp skeletons (corallites). Please handle with care. If not being kept in a tank with strong, surging water flow, be sure to keep clear of sediment with daily "blasting" with a turkey baster or power head. When healthy and kept well, these corals can grow quite fast and are easy to fragment and propagate.

# Goniopora & Alveopora

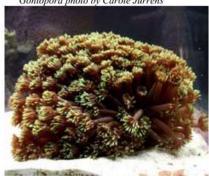
Class Anthozoa, Order Scleractinia, Family Poritidae, Genera Goniopora and Alveopora



Alveopora photo by Gene Schwartz



Goniopora photo by Carole Jurrens



Goniopora photo by Doni Marie

Common names: flowerpot coral, daisy coral, ball coral Natural origin: Indo-Pacific

Sensitivity (Level 4): Until very recently, it was thought that Goniopora were impossible to keep alive in captivity. Thanks to recent research, new food products, and valiant efforts by some aquarists, these corals can now be kept in home aquariums with diligent and committed care. If you choose one of these corals, please be prepared to meet their demanding needs. Alveopora species tend to be slightly easier to care for.

Feeding: These corals have very specific and extremely demanding feeding requirements. Please visit www.goniopora.org for more detailed information.

Lighting (Level 3 to 6): Lighting requirements are moderate. Careful acclimation to any new conditions is especially important for these unforgiving corals.

Water flow: Moderate to strong water flow is preferred. Placement: These corals have long sweeping polyps that should be allowed to freely extend without hitting rocks or other corals that might damage them.

General: As stated, these corals are exceptionally demanding. It is highly recommended that any aquarist considering one do extensive research and reading on their care. If in doubt about having the time, patience and resources required to meet this corals needs, please choose a different coral.

# Gorgonians (Sea Fans and Sea Rods)

Class Anthozoa, Subclass Octocorallia, Order Gorgonacea







top two photos by Doni Marie bottom photo by Gene Schwartz

Common names: sea fans, sea rods

Natural origin: Indo-Pacific

Sensitivity (Level 3 to 5): Adaptability depends greatly on genera and species. Some (mostly the zooxanthellate species) can adapt to captive life with diligent, experienced care. Others (such the azooxanthellate species) will not survive even under the care of the most experienced aquarists.

Feeding: Azooxanthellate sea fans can be very difficult to feed. They need large amounts of small particle food. That said, success is thought possible when keeping them in healthy, exceptionally well fed tanks. The zooxanthellate species are easier to feed but still need variety of small particle food.

Lighting (Level 0, 3, or 7): Little or no light is needed for the azooxanthellate species. Dim lighting is needed for *Subergorgia spp.*, *Diodogorgia nudulifera*, *Swiftia exserta and Leptogorgia miniate* from the Caribbean. More intense lighting is needed for zooxanthellate corals, *Erythropodium spp.* (encrusting gorgonians), *Eunicea spp.*, *Muricea spp.*, *Pseudotergorgia spp.*, and *Plexaura flexuosa*.

Water flow: Strong water flow is needed for feeding and to keep the coral free of algal growth. Ideally, the flow should be perpendicular to the plane of the coral, reversing (alternating) and laminar (as opposed to turbulant, swirling flow).

**Placement:** Place these corals a safe distance from aggressive corals and fast growing soft corals that might overgrow them. Note that some gorgonians can grow quite large (up to a meter in height).

General: The azooxanthellate members of these corals are difficult to keep and certainly not recommended for beginners. Typically, the red or orange, and many yellow colored gorgonians (with white or clear polyps) are azooxanthellate and should be avoided. Some species (the zooxanthellate species) are not quite as difficult to keep. Unfortunately, it's not always easy to identify a species, much less know if that species is one that might do well in an aquarium or not.

# Heliopora (Blue Coral)

Class Anthozoa, Order Helioporacea, Family Helioporidae, Genus Heliopora



photo by Marc Leveson

Common names: Blue Coral, Blue-Ridge Coral

Natural origin: Indo-Pacific

Sensitivity (Level 2): Usually a fairly tolerant, easy to care

for species when fed properly.

**Feeding:** These corals have very small polyps and need to be fed fine particulate foods. Baby brine shrimp, oyster eggs, and other small particle foods are good. A heavily populated sand bed can also provide some good food for these corals. **Lighting (Level 6 to 10):** *Heliopora* can adapt to a range of light intensities. Ideal lighting will depend on the depth and clarity of the water where the coral was initially collected (or cultured). Usually, more intense lighting is preferred.

Water flow: They will benefit from moderate to strong water flow.

**Placement:** They are peaceful corals and should be placed away from more aggressive tank mates.

**General:** Blue-ridge corals are quite unique with their blue, hollow skeletons. Though not a particularly fast growing coral, higher calcium levels (at least 420 ppm) are important.

# **Leather Corals**

Class Anthozoa, Order Alcyonacea, Family Alcyoniidae, Genera Sinularia, Sacrophyton, Lobophytum, Alcyonium, Cladiella, etc.



photo by Jennifer Mendonca





last two photos by Charlie Ehlers

**Common names:** leather coral, colt coral, toadstool/mushroom coral, tree coral, etc.

Natural origin: Indo-Pacific

**Sensitivity (Level 1):** These corals are usually exceptionally tolerant and forgiving. They're also easy to fragment and propagate. Beware of dyed corals (pink leather corals have almost certainly been dyed).

**Feeding:** These corals have extensive feeder tentacles. They feed on very small particle food. Some are pickier eaters than others, so variety is helpful.

**Lighting (Level 3 to 8):** Though adaptable, most prefer more intense lighting conditions. If kept under less light, be sure to feed well.

Water flow: To avoid sediment damage, moderate to strong water flow is preferred.

Placement: It's important to note that some species are highly toxic to stony corals (especially larger polyp stony corals in the genera Lobophyllia, Symphyllia and Trachyphyllia). Since specific species identification of leather corals can be quite difficult (sometimes even to identify a genus), these corals should be added with reservation to any tank with stony corals. Also consider that many leather corals are relatively fast growing and can get quite large. However, this isn't usually so much of a concern since they can be literally cut down when they get too big.

General: Leathers are great corals for beginner aquarists or anyone looking to keep more low maintenance corals. Note that when stressed or introduced into a new tank, they may close up and not open up again for several days or even weeks. This might also happen right before the coral sheds. Stronger water flow will decrease the "shut down" time before shedding. This periodic shedding of the outer layer of cells is a normal occurrence and is thought to help keep algae and/or other corals from growing over them.

It's important to keep the toxicity issue in mind. Someone hoping to keep larger polyped stony corals at a later time should think carefully about adding leathers to their tanks, especially those in the genus *Sacrophyton* which are known to be particularly toxic.

# Lobophyllia/Symphyllia

Class Anthozoa, Order Scleractinia, Family Mussidea, Genera Lobophyllia and Symphyllia







middle photo by Robert Pacheco bottom photo by Leonard Ho

Common names: open brain coral, lobed brain coral Natural origin: Indo-Pacific

Sensitivity (Level 1 to 2): Sensitivity depends somewhat on species, but most are quite tolerant and forgiving when healthy and well fed.

**Feeding:** These corals have strong prey capture ability. They typically have considerably larger polyp mouths and can take larger food than can the

Blastomussa/Micromussa/Acanthastrea species of the same family. They should be fed at night since this is often the only time they will extend their feeder tentacles.

**Lighting (Level 5 to 8):** They can adapt to a range of lighting conditions but tend to prefer more intense light. As always, to prevent bleaching, be careful to properly acclimate the coral to new lighting conditions.

Water flow: Moderate water flow is preferred.

**Placement:** These corals are not aggressive. Even so, they can expand quite a bit and so need plenty of room. Please place them safely away from aggressive corals.

General: Feeding tentacles are usually relatively small and only come out at night. Care should be taken to make sure the coral gets enough food. Slow tissue recession could be a sign of starvation. Regular night-time target feeding can help.

# Montipora

Class Anthozoa, Subclass Hexacorallia, Order Scleractinia, Family Acroporidae, Genus Montipora







top two photos by Mike LaPorte bottom photo by Gene Schwartz

Common names: velvet coral Natural origin: Indo-Pacific

**Sensitivity (Level 2):** Though not exactly beginner corals, they're usually considerably more tolerant than their *Acropora* cousins.

**Feeding:** These corals have nearly invisible polyps and rather poor prey capture ability. They fed on food of very small particle size. In a well fed tank with a variety of food, additional feeding is usually not necessary.

Lighting (Level 6 to 10): Most *Montipora* species can adapt to a considerably wide range of light intensities but tend to prefer and grow faster under stronger lighting. Like all photosynthetic corals, changing lighting conditions can sometimes result in color changes in the coral. Note that when one of these corals changes color, that doesn't necessarily mean the coral is unhealthy. The coral may simply be adapting to your lighting conditions. This is true even of aesthetically unfavorable color changes. As always, failure to acclimate to new lighting can cause bleaching.

Water flow: Plating species can be especially susceptible to

sediment damage. Both branching and plating types need strong water flow.

**Placement:** These are very peaceful corals. Keep safely away from aggressive corals and be careful of fast-growing encrusting corals that will compete for space.

**General:** Different *Montipora* species can be encrusting, plating or branching. All three growth forms can grow very fast when kept well. Steady calcium levels of approximately 420 ppm are best for coral health and growth.

# Pavona (Cactus Coral)

Class Anthozoa, Subclass Hexacorallia, Order Scleractinia, Family Agariciidae



photo by Mike LaPorte

Common names: cactus coral, lettuce coral, potato chip coral

Natural Origin: Indo-Pacific

Sensitivity (Level 2): Though scarce in the aquarium trade, these corals can be relatively forgiving and tolerant in healthy aquariums.

Feeding: These are very small polyped corals. They feed on very fine particle foods (no need for targeted feeding).

Lighting (Level 6 to 10): These corals can adapt to a range of lighting intensities over time but generally prefer more intense lighting. As for all corals, changing lighting conditions can sometimes result in color changes in the coral. Note that when one of these corals changes color, that doesn't necessarily mean the coral is unhealthy. The coral may simply be adapting to your lighting conditions. This is true even of aesthetically unfavorable color changes. As always, take care to acclimate to new lighting conditions.

Water flow: Moderate to strong water flow is important for feeding and to prevent sediment damage.

**Placement:** These are peaceful corals. Place safely away from aggressive corals. Be mindful of fast growing encrusting corals that will compete for space.

General: These corals have thin, fragile skeletons and interesting growth patterns that often look like clusters of petals. Contrary to normal wild behavior, in captivity, many species extend their polyps during the day. Though not especially fast growing, their resistance to disease upon breaking makes them good corals for captive propagation by fragmentation.

## **Pectiniidae**

Class Anthozoa, Order Scleractinia, Family Pectiniidae, Genera Echinophyllia, Oxypora, Mycedium and Pectinia



photo by Gene Schwartz

Common Names: chalice coral Natural Origin: Indo-Pacific

**Sensitivity (Level 2 to 3):** Though not exactly beginner corals, most are tolerant and forgiving. Please note that they have delicate skeletons that break easily. Handle with care.

**Feeding:** Most species feed at night with long feeding tentacles. They generally have impressive prey capture ability and can feed on a variety of finely chopped sea foods, mysis and brine shrimp.

Lighting (Level 3 to 6): Though adaptable, moderate lighting is preferred. The ideal lighting for any particular coral will depend on the species and the depth and clarity of the water where it was collected or cultured. As with any zooxanthellate coral, coloration can change in response to changing lighting conditions. As always, sudden changes in lighting conditions can result in bleaching. Be sure to acclimate properly.

Water flow: Relatively gentle, but constant flow is ideal. Be sure that debris and sediment do not collect on the coral. **Placement:** These can be aggressive corals. Please place with care, leaving several inches of free space around each specimen. They should also be placed at a slant to help keep the coral free of debris.

**General:** Members of this family are copious mucus producers and are probably not good candidates for smaller tanks less than 15 gallons. In small volumes, excessive coral mucus can cause fowling of the water and threaten the health of the whole tank.

# Pipe Organ Coral

Class Anthozoa, Order Alcyonacea, Family Tubiporidae, Genus Tubipora





photos by Doni Marie

Common names: pipe organ coral, organpipe coral Natural origin: Indo-Pacific

Sensitivity (Level 3 to 4): These corals can be difficult to keep because they are difficult to feed. They tend to fair better in established aquariums with well populated sand beds. The manner of collection may be a factor in the difficulty of maintaining these corals in aquariums. A coral that is well established on a rock base will usually fare well while a coral that has been collected by being sliced from the top of a colony in the wild will not.

**Feeding:** The coral's feathery polyp tentacles help it catch food suspended in water. They appreciate food of smaller particle size, but shouldn't be target. Oyster eggs and other such small particle foods are recommended.

**Lighting (Level 7 to 10):** Though adaptable, these corals prefer more intense lighting. Ideal lighting will depend on the depth and clarity of the water at which the coral was collected or cultured. As always, please acclimate to new lighting conditions.

Water flow: Moderate to strong water flow is important for effective feeding and to prevent sediment damage.

**Placement:** Pipe organ corals are not aggressive. Provide enough space for the coral polyps to extend without inhibition. Polyps can reach up to a foot in height when fully grown and fully extended.

**General:** The polyps of these corals retract into red, pipelike structures held together with calciferous (calcium carbonate containing) horizontal plates. This often leads new aquarists to mistake them for stony corals when they are actually classified as soft corals.



# Plerogyra and Physogyra (Bubble Coral)

Class Anthozoa, Order Scleractinia, Family Euphyllidae, Genera Plerogyra and Physogyra



photo by Gene Schwartz



Common names: Bubble coral Natural origin: Indo-Pacific

**Sensitivity (Level 2):** These are generally tolerant, forgiving corals.

**Feeding:** Bubble corals, with their exceptionally strong prey capture ability and large polyp mouths, can easily feed on chunky, meaty sea foods. Despite their ability to consume very large food items, smaller chunks are recommended.

**Lighting (Level 6 to 8):** Though adaptable, these corals prefer more intense lighting. Ideal lighting will depend on the depth and clarity of the water at which the coral was collected or cultured. As always, please acclimate to new lighting conditions.

Water flow: These corals seem to prefer moderate water flow. Too much flow can inhibit bubble polyp extension. Enough water flow to keep the coral free of debris should be sufficient.

**Placement:** Bubble corals are very aggressive. Please give plenty of room. Do not keep with potentially toxic leather corals

**General:** Amazingly, the round bubbles of tissue displayed during the day transform into long feeding tentacles after the lights go out. The bubbles are thought to be used to gather light during the day for photosynthesis.

# Pocillopora (and Stylophora)

Class Anthozoa, Order Scleractinia, Family Pocilloporidae, Genera Pocillopora and Stylophora



Common names: cauliflower coral Natural origin: Indo-Pacific

Sensitivity (Level 3 to 4): These corals can be quite sensitive and intolerant of unstable conditions. Though not impossible to keep, they require experienced care and well established aquariums.

**Feeding:** Small polyp corals, they have poor prey capture ability and need food of very small particle size. In a well fed tank with a variety of food, additional feeding might not be necessary.



Lighting (Level 6 to 10): Though adaptable, *Pocillopora spp.* tend to grow faster and fair better under more intense lighting. The ideal lighting for any particular coral will depend on the species and the depth and clarity of the water where it was collected or cultured. As with any zooxanthellate coral, coloration can change in response to changing lighting conditions. And as with all corals, sudden changes in lighting conditions can result in bleaching. Be sure to acclimate properly.

**Water flow:** Like *Acropora spp.* and *Montipora spp.*, these corals need strong water flow for effective feeding, health and growth.

**Placement:** These are not aggressive corals and can be overgrown or out-competed by faster growing or more aggressive neighbors.

General: Some species are confused for branching *Montipora*. Fortunately, care requirements are mostly similar for both corals. Steady tank parameters and calcium levels of at least 420 ppt will promote coral health and growth. *Pocillopora spp.* can grow relatively fast under favorable conditions. A brooding coral, *Pocillopora* can sexually reproduce in captivity.



top photo by Mike LaPorte bottom two photos by Charlie Ehlers

# **Porites**

Class Anthozoa, Order Scleractinia, Family Poritidae, Genus Porites

damage.



photo by Charlie Ehlers



photo by Larry Teske

Common names: boulder coral, Christmas tree worm rock Natural origin: Indo-Pacific

Sensitivity (Level 3 to 4): These corals can be quite unforgiving and intolerant. They are not impossible to keep but demand well established aquariums and experienced care. Feeding: A small polyped coral, they have poor prey capture ability and feed only on very small particle food. In a well fed tank with a variety of food, additional feeding might not be necessary.

Lighting (Level 7 to 10): Though adaptable to some degree, these corals usually need more intense lighting conditions. The ideal lighting for any particular coral will depend on the species and/or the depth and clarity of the water where it was collected or cultured. As with any zooxanthellate coral, coloration can change in response to changing lighting conditions. As always, sudden changes in lighting conditions can result in bleaching. Be sure to acclimate properly.

Water flow: Strong, turbulent water flow is important for effective feeding, good health and to prevent sediment

**Placement:** Not a particularly aggressive coral in captivity, they can easily be overgrown by more aggressive tank mates. **General:** In the wild, *Porites* corals grow to be quite massive, some being several thousand years old. To increase chances of survival, keep only in well established aquariums that are *at least* a year old. Steady tank parameters and calcium levels of at least 420 ppm will promote coral health and growth.

# Seriatopora (Bird's Nest)

Class Anthozoa, Order Scleractinia, Family Pocilloporidae, Genus Seriatopora



photo by Jason Huber



photo by Charlie Ehlers



photo by Mike LaPorte

Common names: bird's nest coral Natural origin: Indo-Pacific

Sensitivity (Level 2 to 3): These corals are generally less tolerant of unstable conditions. Sensitivity depends heavily on particular species, place of origin, and if caught wild or aquacultured.

**Feeding:** A small polyped coral with poor prey capture ability, they need food of very small particle size. In a well fed tank with a variety of food, additional feeding might not be necessary.

**Lighting (Level 6 to 10):** Though quite adaptable, *Seriatopora spp.* tend to thrive and grow faster under more intense lighting conditions. The ideal lighting for any particular coral will depend heavily on the species and the depth and clarity of the water where it was collected or cultured. As with any zooxanthellate coral, coloration can change in response to changing lighting conditions. As always, be sure to acclimate properly.

Water flow: These corals need strong water flow for effective feeding, good health and growth.

**Placement:** To compete with other corals for space, these corals have short stinging sweeper tentacles and produce toxic substances in their immediate area to intimidate neighbors. Though they can hold their own territory and outcompete peaceful corals, they may still lose a battle with a more aggressive coral.

**General:** To increase chances of success, do not attempt to keep these corals in tanks less than a year old. Steady tank parameters and calcium levels of at least 420 ppm are important for health and growth.



# **Star Polyps**

Class Anthozoa, Subclass Octocorallia, Class Alcyonaria, Family Clavulariidae, Genus Pachyclavularia



photo by Mike LaPorte

Common names: star polyps Natural origin: Indo-Pacific

Sensitivity (Level 1): Star polyps are usually tolerant, adaptable and easy to care for (though may take a few days or weeks to open up in a new environment or after stressed). Feeding: These corals have relatively poor prey capture and will only feed on smaller particle food. In a healthy, well fed tank you won't need to worry about these corals getting enough food.

**Lighting (Level 5 to 10):** They can adapt to a range of light intensities, but tend to thrive and grow faster under more intense lighting.

Water flow: Moderate to high flow is best. These corals can be vulnerable to sediment damage. If you see that debris has collected on the coral, blast with a turkey baster or powerhead.

**Placement:** Though not an aggressive coral, they can grow very fast when healthy (to the point of becoming a nuisance). They can over grow peaceful, slower growing corals.

General: Star polyps are sometimes described as a "weed coral" for their rapid, unrelenting growth. They are a good "starter coral" for a soft coral tank, but can ultimately take over the tanks, encroaching on other corals to the point of becoming a problem. They are easy to fragment and propagate.



# Sun Coral (azooxanthellate)

Class Anthozoa, Subclass Hexacorallia, Order Scleractinia, Family Dendrophylliidae, Genus Tubastraea



photo by Stephen Hubbard

**Common names:** yellow or orange sun coral, orange or yellow sun polyp, black sun coral

Natural origin: Indo-Pacific

Sensitivity (Level 4): Azooxanthellate sun coral have demanding feeding requirements that can make them difficult to care for. They are prone to tissue recession which may be a sign of starvation.

**Feeding:** These corals need frequent and careful target feeding. Some aquarists use an inverted bowl (or other container) placed over the coral during target feeding to help the coral capture enough food. Cyclopeeze (micro crustaceans) and baby brine shrimp are some good food choices. Variety is also helpful.

**Lighting (Level 0 to 3):** The azooxanthellate sun corals don't need light. Low intensity and/or indirect light is best. Too much light may encourage nuisance algae to grow over the surface of coral.

Water flow: Moderate to strong water flow is important. Placement: These are not aggressive corals. They are usually placed at the bottom of an aquarium and away from aggressive, stinging corals.

**General:** These corals have unfortunately high mortality rates in captivity. That said, frequent and successful feeding can greatly improve chances of survival.

# Trachyphylliidae

Class Anthozoa, Order Scleractinia, Family Trachyphylliidae



photo by Mike LaPorte

Common names: lobed brain coral, open brain coral

Natural origin: Indo-Pacific

**Sensitivity (Level 2):** These corals are generally tolerant, but need to be fed well.

Feeding: *Trachyphyllidae* have impressive prey capture ability. They will ready eat a variety of meaty aquarium foods. Be forewarned, they can even eat small aquarium fish! **Lighting (Level 4 to 7):** These corals seem to prefer moderate lighting. They can adapt to more intense lighting if allowed to do so slowly over time. As with most all corals, sudden changes in lighting can cause bleaching.

Water flow: Moderate to stronger water flow is ideal. Placement: These are very aggressive corals best placed in a sand or rubble bottom. Give them plenty of room. Sometimes tangs and hermit crabs will nip at and/or irritate the coral's soft tissue. Keeping the tank well fed can help prevent competition for food.

General: Slow tissue recession can be a sign of starvation. Though these corals have impressive feeder tentacles, in captivity, it may take them some time to get "settled in." If after several weeks you still do not observe an extension of feeder tentacles, you can try to encourage a feeding response with night-time target feeding. One hour after the lights go out, turn off circulation during feeding so that the food can fall onto the coral. Give the coral an hour or two to "grab hold" of the food, then turn the water flow back on. Do this daily (or every other day) until feeder tentacles extend

regularly in anticipation of feeding.

## **Turbinaria**

Class Anthozoa, Order Scleractinia, Family Dendrophylliidae, Genus Turbinaria





top photo by Audrey Bowens bottom photo by Charlie Ehlers

Common names: pagoda cup coral, turban coral, vase coral Natural origin: Indo-Pacific

Sensitivity (Level 1 to 2): These corals are generally tolerant, forgiving and without much need for specialized care. Always avoid purchasing dyed corals.

**Feeding:** *Turbinaria spp.* have medium-sized polyps and good prey capture ability. They feed on a variety of foods including Cyclopeeze (micro crustaceans), mysis and brine shrimp and other meaty aquarium foods. When healthy, the polyps of many species extend and expand quite a bit. When fully expanded, the coral looks "bushy" with tentacles.

**Lighting (Level 4 to 8):** *Turbinaria* can adapt to a wide range of lighting conditions. As always, to prevent bleaching, be sure to acclimate to new lighting.

Water flow: These corals can be particularly vulnerable to sediment damage (especially when in the cup-shaped juvenile formation). Position the coral to minimize collection of debris and place in areas of moderate to high water flow. Placement: If cup-shaped, place the coral such that the cup is on its side (rather than sitting "up-right"). Orienting the coral this way will help keep debris from getting trapped in the "mouth" of the cup. Lighting also determines the cupping of these corals. The higher the light levels the more closed the cup, the lower the light levels the flatter. Leave plenty of room for full polyp extension. They are not aggressive corals. General: These corals feed during the day. Tentacles usually close up at night. It may take several days or weeks for the coral polyps to open up after being introduced into a new home or environment, or after being stressed.

## Xenia

Class Anthozoa, Order Alcyonacea, Family Xeniidae, Genus Xenia



photo by Mike LaPorte

Common names: pulse coral, Xenia

Natural origin: Indo-Pacific

Sensitivity (Level 1): Though generally very easy to care for, these corals can be somewhat unpredictable. Some colonies show impressive tolerance and forgiveness of varying conditions while others do not. They are also notorious for sudden and unexplainable death and do not ship well.

**Feeding:** Specific feeding habits are largely unknown. They are thought to absorb nutrients through their soft tissue (possibly aided by the pulsing of the coral).

**Lighting (Level 6 to 10):** Xenia can adapt to a wide range of lighting conditions, but seem to prefer more intense lighting. As always, be sure to properly acclimate to knew lighting.

Water flow: Moderate to high water flow is important. Higher water flow may increase pulsing activity.

**Placement:** Though not aggressive corals, like star polyps, they are relentlessly fast growing when healthy. They can become a nuisance in tanks with slower growing stony corals. When injured or dying, they can release toxins. Carbon filtration and prompt removal of injured/dying species can help control any ill-effects of this toxic release.

General: Pulsing activity is something of a mystery (its function and mechanism are currently unknown). Xenia in aquariums sometimes stop pulsing (often without observable cause) but continue to live and grow regardless. Some aquarists have noticed a cessation of pulsing with low pH and/or alkalinity. Polyps will close at night and when stressed. They may take a few days or even weeks to open up in a new environment.

## Zoanthids

Class Anthozoa, Subclass Zoantharia, Order Zoanthidea





**Common names:** zoos, zoanthids, button polyps (sometimes inconsistently given names like "fire and ice" and "people eaters" based on phenotypic characteristics such as coloration and size that may have little or nothing to do with actual species identification)

Natural origin: wide-ranging, Indo-pacific Sensitivity (Level 1): Zoanthids are usually quite tolerant and easy to care for.

**Feeding:** Appropriate food particle size depends on the size of the particular coral's polyp mouth size. Though usually not necessary, some aquarists target feed to encourage faster growth.

**Lighting (Level 4 to 10):** Though more intense lighting is usually preferred, many zoanthids can adapt to much lower light intensities. As with any zooxanthellate coral, coloration can change in response to changing lighting conditions. **Water flow:** These corals do well with moderate to high water flow.

Placement: Though not aggressive corals, they are fast growing when healthy and need considerable space (like Xenia and star polyps, they can become a nuisance in tanks with slower growing stony corals competing for space).

General: Polyps will close at night and when stressed. They may take a few days (or even weeks) to open up in a new environment. WARNING: Zoanthids secrete a slime that is highly toxic to humans. It's wise to use gloves when touching these corals. Do not touch polyps if you have an open wound. Do not touch eyes or mouth after touching polyps.