

Difficult Anemone Species

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By John Tullock

Of the clownfish host anemones, certain ones appear in the aquarium trade with greater frequency than others. Less commonly seen are *Heteractis aurora* and *Heteractis malu*. These are known, respectively, as the beaded anemone and Hawaiian or sand anemone. None are well-suited to aquarium care and should be avoided. *Heteractis aurora* possesses tentacles with inflated areas along their long axis, giving them the appearance of a string of beads. *Heteractis malu* has short, stubby tentacles, some of which are inflated near the tips.

The Caribbean carpet anemone (*Stichodactyla helianthus*) lives attached to rocks in shallow water where it can grow to a foot in diameter. Although related to the giant carpet anemones of the Indo-Pacific, it is seldom (if ever) accepted as a clownfish host. It is a challenging aquarium subject. This is possibly due to damage during collection, as it is notoriously difficult to remove from its preferred location among rocks and sand.

Among the reasons for discouraging the typical hobbyist from purchasing wild-caught anemone specimens is because removing an anemone from a wild habitat eliminates a potential home for the many generations of clownfish that the anemone would have otherwise hosted. Often the anemone perishes within a few months in the aquarium, whereas its lifespan in the sea is thought to be measured in decades. Some authorities even suggest that anemones can live a century or more. During that life span, the anemone can host hundreds of clownfish. Furthermore, little is known about the life history of anemones, and it is impossible to ascertain the impact that removing a mature specimen may have on the breeding population. Given that small individuals are rare, it is suspected that anemones reproduce very slowly. This means that an area from which anemones have been eliminated by collectors will not be re-colonized for many years, perhaps not even in a human lifetime.

In light of these concerns, it behooves every aquarist to understand the challenges involved and be prepared to meet them before purchasing any of the larger anemones, in particular those that are known to adapt poorly to aquarium life. The least demanding species are *Condylactis gigantea* and *Entacmaea quadricolor*. The former is extremely abundant in the Atlantic-Caribbean region. The latter is available as captive-propagated stock, which should be sought out in preference to wild-caught specimens.

If you want to try your hand at keeping an "easier" anemone but don't want the challenge posed by the clownfish hosts, you might opt for a theme tank with *Bartholomea annulata*. Known as the "curlicue" or "ringed" anemone, it is found in a variety of habitats in the tropical Atlantic and Caribbean. It does need intense lighting to maintain its zooxanthellae but is more adaptable than most other anemones. Preying mostly on zooplankton, *Bartholomea* can be maintained with daily feedings of live or frozen brine shrimp, including newly hatched nauplii. Supplement these foods with frozen Mysis, chopped shrimp meat or chopped fish. Larger specimens can be fed a piece of fish or shrimp now and then, in addition to the plankton diet. This anemone participates in several interesting symbiotic relationships that can form the basis for a theme tank. For example, the curlicue shrimp (*Alpheus armatus*) makes its home in a burrow beneath the anemone's pedal disk. The shrimp is sometimes sold as the "red popping shrimp." A variety of other shrimp, including several *Periclimenes* species and *Thor amboiensis*, have been reported seeking shelter among the anemone's stinging tentacles. Get the help of a knowledgeable dealer if you want to re-create this relationship in the aquarium.

Phymanthus crucifer, sometimes known as "rock flower anemone," is abundant in shallow intertidal regions among rocks. It also needs abundant light but is otherwise easy to keep. Feed daily with a plankton substitute. Several anemones can be kept in the same tank and will bury the column in the substrate. Provide coarse sand with a scattering of small rocks to mimic the anemone's natural habitat.

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