

Aquarium of Tanne - The Netherlands

This tank was initially designed to keep colorful small-polyped stony (SPS) corals, but as time passed by, I started adding other animals like the soft corals.

Tank

The tank measures 40 x 16 x 16 inches and contains 42 gallons of water. The temperature range is 78 to 86 degrees Fahrenheit.

Filtration

The tank has an internal overflow. The overflow contains mechanical filtration media that is changed every 10 days. After passing through this "filter," the water enters a 13-gallon sump. There are two skimmers in the sump — a Ratz skimmer connected to a powerhead with a capacity of 290 gallons per hour (gph), along with a small filter with a little bag of granular activated carbon (the carbon, about 25 grams, is changed about every three months) and a Tunze skimmer designed for tanks up to 450 gallons.

To keep the temperature stable, there is also a commercial aquarium chiller. A CO₂/calcium reactor was also added to keep alkalinity and calcium levels high. This reactor is filled with broken pieces of coral. An Eheim pump with a capacity of 315 gph pumps the water back to the main tank.

There are three powerheads in the main tank. Two powerheads are connected to separate wavemakers to ensure proper water movement. These powerheads have a capacity of about 420 gph. Another powerhead, with a capacity of about 650 gph, is switched on for about three hours at night and three hours during the day.

Substrate

There is about 35 kilograms of Indonesian live rock. The glass bottom is covered with small pieces of calcium carbonate, because high-quality coral sand is becoming scarce in the Netherlands.

Lighting/photoperiod

A metal halide 10,000 Kelvin lamp is on for 12 hours and a 70-watt actinic 03 for about 13 hours.

Water chemistry

pH = 8.2 to 8.5

Calcium = 420 to 450 parts per million (ppm)

Carbonate hardness (German measure) = 8 to 12 dKH

Nitrate = 5 to 10 ppm

Phosphate = not detectable with Salifert test kit

Salinity = 34 parts per thousand

Maintenance

This tank was set up about three years ago using Reef Crystals and reverse osmosis water. Water changes of about 12 gallons are done about twice a month.

Carbon is changed about every three months and the mechanical media every 10 days. The skimmers are cleaned weekly. The glass is cleaned when necessary.

Additives

The following supplements are added: 3 milliliters (ml) of Combisan, 0.4 ml of a 10-percent sodium iodide solution and 4

ml of a strontium chloride solution. Natriumjodate is used instead of Kaliumjodide because jodate ions seem to be more stable in a reef system, leading to better coloration of the small-polyped stony corals and clams. Feeding is done twice a day using TetraMin flake food and frozen Artemia, Cyclops, krill and mysid shrimp.

Inhabitants

Fish

A yellow tang (*Zebrasoma flavescens*), a flame angelfish (*Centropyge loriculus*), a Banggai cardinalfish (*Pterapogon kauderni*), five blue-green chromis (*Chromis viridis*), a cleaner goby (*Gobiosoma evelynae*), a Janss's pipefish (*Doryrhamphus janssi*) and a royal gramma (*Gramma loreto*) share this tank with the invertebrates listed below.

Soft corals

Some pieces of unidentified leather coral, probably a *Sinularia* species, a small piece of *Sinularia dura*, a *Capnella* sp. and a gorgonian that closely resembles a *Rumphella* sp. from Indonesia. This coral was collected at Bonaire by a friend of mine.

Hard corals

Acropora echinata, light-green *A. cytherea* (?), *A. formosa* (?), a Berlin *Acropora*, a light-blue *Montipora digitata*, a light yellow/green *Stylophora pistillata*, a *Psammocora contigua*, *Leptoria phrygia*, *Platygyra* sp., *Seriatorpora hystrix*, *S. damicornis*, *Pocillopora damicornis* and three *Fungia* species.

Other invertebrates

A *Tridacna crocea* clam from a hatchery in the Philippines, a *T. maxima* from the Red Sea and a wild-caught *T. squamosa* from Indonesia. There are also three *Astraea* snails and two red-legged hermit crabs. Three serpent snails clean the tank environment. Because of the presence of three *Lysmata wurdemanni* shrimps there are no *Aiptasia* anemones in this tank.

Comments

This tank was initially designed to keep colorful small-polyped stony (SPS) corals, but as time passed by, I started adding other animals like the soft corals. Now I'm experimenting with elevated nitrate levels in order to achieve a better growth rate in the SPS corals. To elevate these levels I'm increasing the fish load.

Many of the invertebrates haven't only been purchased at local fish stores, but were obtained as propagated specimens. Additionally, I propagate almost all the corals, including the *Fungia* species. A local fish shop gave me a small piece of live rock with two *Fungia* stems on it. About twice a year each stem releases a juvenile.

I also took a trip to Indonesia about two years ago and "imported" the dark green *Acropora* species myself from Bali. Near the hotel there was a disturbed coral reef with lots of small pieces of coral lying on the bottom between the coral rubble. I packed a very small piece of coral very well in order to get it to Holland alive. The coral is doing great!