

Setting Up a Marine Aquarium for SE England Specimens

The setting up of an aquarium for British marine inter-tidal animals is an option for educators. There are many advantages, and a few problems which can be overcome - the majority of creatures come from an extremely harsh environment and can cope with a great deal.

Spend, Spend, Spend.

The first stage is to think about cost. The smallest tank that you can fit a reasonable hood on is 24" x 18" x 12". You can often find these aquarium tanks in the second hand columns (also call aquarists to check if they have any used equipment). Your basic shopping/materials list should look like this:

Aquarium - 60cm x 30cm x 45cm.....approx. £15

Hood with light.....approx. £35 - £55

Plastic sliding cover...approx. £5

Carpet or foam base (for beneath the tank to prevent shocks) Free

Under gravel filtration plastic board with uplifter tube to powerhead (which draws the water up and creates air in the tank).....approx. £35

Hydrometer for measuring salinity of water...approx. £15

Thermometer...approx. £5

Coral gravel or medium beach gravel...£10/free

Artificial sea water or the real stuff (problems with getting the water and transporting to the tank).....£10/free

Total: £130 - £150

(Ask for discounts if buying a complete system!)

The Set Up

Choose a firm surface, preferably a sturdy table. The weight of a forty litres+ aquarium is heavy. Site the table out of direct sunlight. Make sure a convenient electrical plug outlet is nearby. Place the aquarium on the foam or carpet. Inside the clean tank place the plastic filters so they achieve a good, clean contact with the glass. Install the uplifter tube with the power head pump on top. Seal any extra hole in the plastic filter bed with the plug provided. Place coral gravel/beach gravel on top to a depth of approximately 5cm depth.

Make up the artificial sea water following instructions on the packet. When you follow the directions aim for a salinity 34 parts/ thousand, or a reading on the hydrometer of 1.025 specific gravity, at 15c. There are many long articles for those interested on the relationship between water temperature and salinity. Stay in the range of 1.020 - 1.025 specific gravity, at 15c and you should be all right. Check salinity/specific gravity weekly - adjust levels if needed. Replace evaporated water weekly with fresh water..

As with salinity, much is written about temperature. You should be all right if you stick with a common sense approach. Temperatures up to 20c are acceptable, depending on stocking levels and hardiness of species. Don't get any refrigeration equipment - it's costly and generally unnecessary. You can add ice cubes in a polythene bag to reduce temperature on the hottest of days or disassemble the aquarium during the hottest months.

Stocking

Stocking is important. We haven't had problems stocking on the same day we make up the artificial sea water but if you can, wait and build up levels slowly- give the system a chance to build up active bacteria and other nutrients (introducing small amounts of natural sea water or mollusks such as mussels can help). Don't be tempted to overfill.

A suggested list is:

Anemones - tough and beautiful. Feed with diced mussel; add this to the water stream created by the power pump, or use tweezers to drop food individually into the animal's mouth.

Small crabs - feed with small pieces of mussels.

Seaweeds are difficult to keep but can be secured with a rock and then replaced once they decay.

Periwinkles - move around the glass and help keep it clean.

Winkles - not very mobile but do graze a bit.

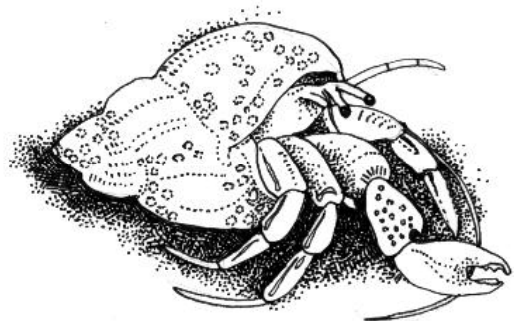
Shrimps - beautiful but don't expect to keep them safe from marauding crabs.

Prawns are even prettier and a safer bet because they don't burrow.

Blennys and bearded rock fish are beautiful and tough, small ones may not survive with anemones. Make sure these and others have space to hide under rock bridges or in seaweed clumps. Feed with frozen (brine shrimp) or dried food purchased from aquarists - talk to your local shop.

Returning Stock.

We suggest a one-month holding of marine species. Empty the aquarium using a simple hand primed suction pump. Carefully return animals to the rock pools where they were found.



RORE offers support in setting up, stocking and maintaining aquariums (see the **RORE** section).