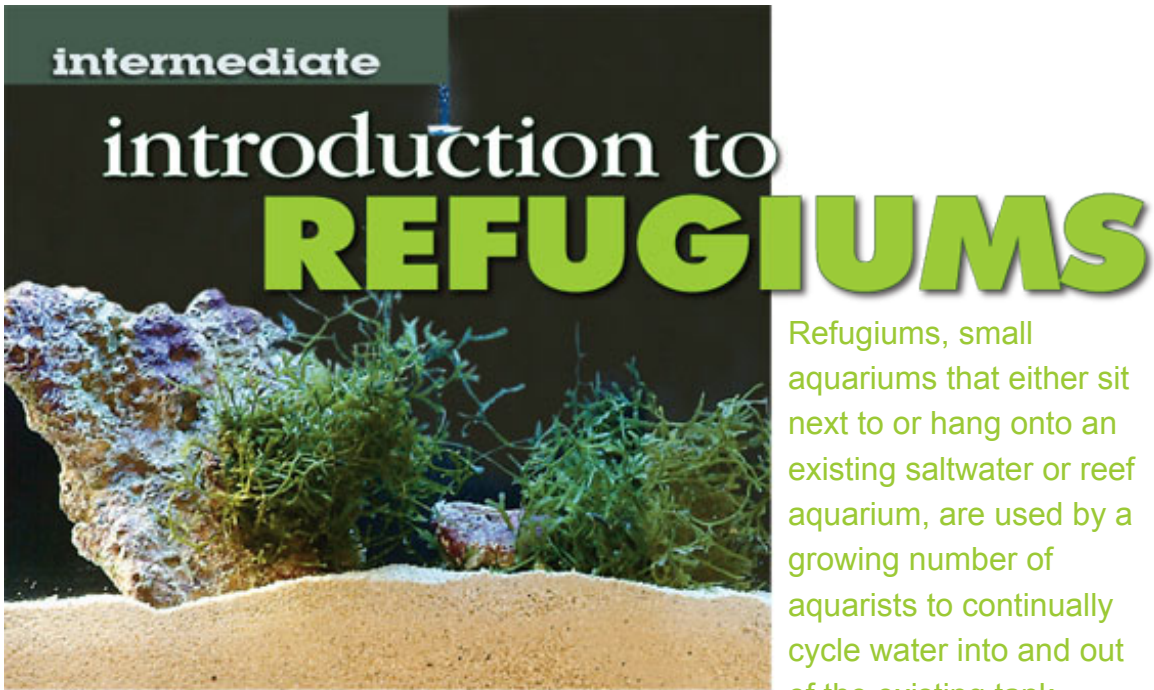


## Refugiums 101

*Drs. Foster & Smith Educational Staff*



Refugiums, small aquariums that either sit next to or hang onto an existing saltwater or reef aquarium, are used by a growing number of aquarists to continually cycle water into and out of the existing tank.

Typically containing aragonite live rock, macroalgae (plants), and a deep sand or mud bed, refugiums:

- Provide existing aquarium inhabitants with natural food sources such as phytoplankton and zooplankton
- Filter water naturally (dramatically lowering nitrate and phosphate levels)
- Stabilize water conditions (especially oxygen level and pH)
- Help control algae growth in the existing aquarium
- Add trace elements back into existing aquarium water
- Serve as temporary acclimation tanks for new inhabitants

Neighboring refugiums - those set up next to, or nearby, an existing aquarium - can also reduce the number of necessary water changes.

Hang-on refugiums are either an acrylic box that hangs on the outside of the primary aquarium, such as the [AquaFuge External Hang-On Refugium](#), or a small acrylic box that attaches to the interior wall of the primary aquarium, such as the In-Tank Refugium.

Refugiums offer an ideal natural solution for enhancing and maintaining healthy conditions in an existing aquarium.