REEF 1 of 10

BAHRAIN ARTIFICIAL REEF PROGRAM

OBJECTIVE: ENHANCE COMMERCIAL FISHERIES

MARCH 2012

SOI ROLE: Assistance with Site selection, reef design, provision of custom reef units to suit target species, training on construction of reef units, deployment supervision, monitoring methodology

Photo 1

Loaded barge showing the various size Reef Balls, Wind Tower and Anti trawl units.

A total of 284 units were deployed ~20km east of Bahrain, 9m depth.

This is reef 1 of 10. Each reef consists of 16 clusters. Each cluster comprises 16 reef units of various sizes. Distance between clusters is 15-20m. Our rule of thumb for spacing between clusters for these units is 1m for every unit in the cluster.

Photo 2

Use of a spreader bar allows slinging of five different sized Reef Balls. This saved significant time in deployment and created 'bommies' of an optimum size.

Curved units in foreground are called Ridge Modules and designed to mimic the natural caprock ridges found in the Arabian Gulf, a favourite refuge for commercially important grouper.
Photo 3

Wind Tower reef unit designed by SOI for this project. The unit incorporates local architecture (e.g. the traditional ‘wind tower’ or Bâdgir) in a way that will appeal to the target species including the commercially important grouper.

The tower will act as a beacon and attract pelagics including baitfish. Three Wind Towers are deployed in each reef centre so that they work together.

Specs: 3.2m x 2m, 9 tonnes

Photo 4

Anti trawl unit designed by SOI for this project. As with the Wind Tower, local architecture has been used to create the protective spaces and holes that will suit target species including lattice patterns to reduce grazing by urchins.

The units have been made intentionally large so that they act as mini reefs and are productive even though they are deployed without other reef units nearby.

Specs: 2m x 2m, 6 tonnes

The Bahrain artificial reef program is a two year program and includes 1 yr of monitoring. The program and contract is managed by a skilled local company ‘Reef Arabia’ (www.reefarabia.com) that we highly recommend for artificial reef services and reef units in the Gulf.