

critters@lembeh



house reef restoration project



In March of 2003, critters@lembeh initiated a House Reef Project in order to help regenerate the reef outside the resort. Due to their outstanding commitment to the environment along with their extreme generosity of both time and accommodation, they have worked together with student researchers from around the world to study the methodology, effectiveness and diversity possible through the use of artificial reef structures. Coral transplantation, invasive species control, population, species and family data as well as growth rate measurements are just a few examples of the type of research being done.

The following is a guide detailing five of the structures currently in place and examples of the types of organisms found at each.

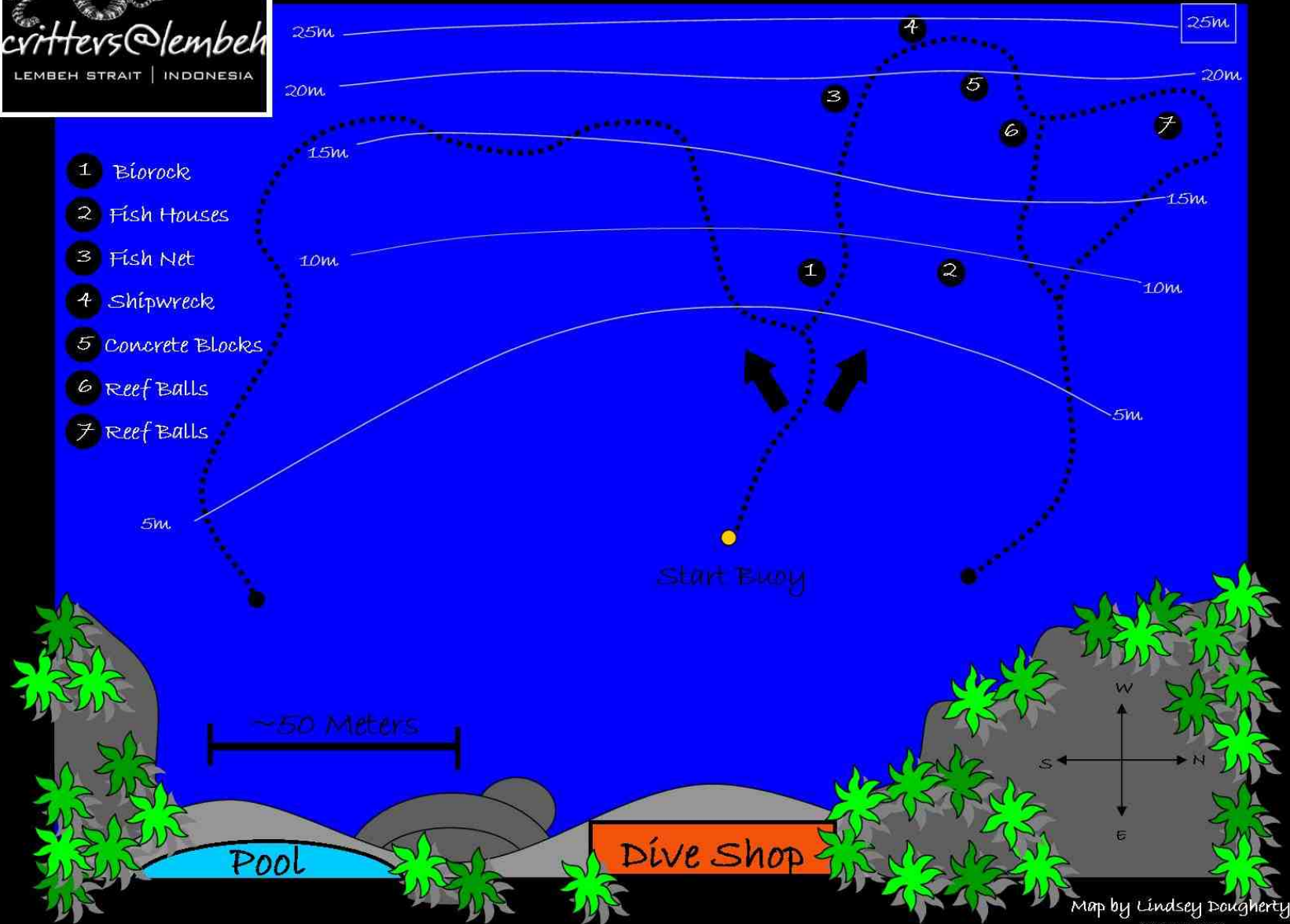
If you would like to contribute towards maintaining this partnership of conservation and education in the future, donations are kindly accepted through the Dive Shop.

Lindsey Dougherty
Student Researcher, May 2010
University of Colorado at Boulder



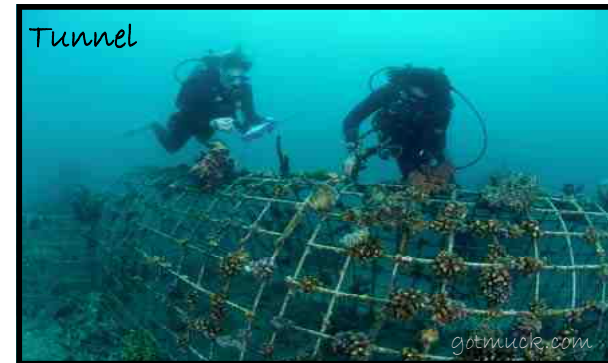
House Reef

- 1 Biorock
- 2 Fish Houses
- 3 Fish Net
- 4 Shipwreck
- 5 Concrete Blocks
- 6 Reef Balls
- 7 Reef Balls



Map by Lindsey Dougherty
May 2010

1 Biorock



The Biorock structures were installed in December of 2007. Biorock is the application of a low voltage current to a conductive structure. The current is harmless to swimmers and marine life and causes dissolved minerals in the seawater to precipitate and adhere to the structure, including the formation of calcium carbonate, which is the basic structure of coral. Biorock has been found in studies to increase the survival of transplanted coral fragments in addition to attracting wild corals, helping to potentially restore damaged reefs. The three Biorock structures are Tunnel, Pagoda and Dome. Although the electricity supply to the Biorock has been non-functional since October of 2009, the structure growth is very successful.

Examples of Species Found Here:

- Broadclub Cuttlefish
- Devil Scorpionfish
- Common Lionfish
- Tiger Shrimp
- Nudibranchs



2

Fish Houses



The Fish Houses were installed during April–June of 2003, and are intended both to facilitate coral growth as well as provide protection and serve as feeding grounds for herbivorous fish. They are spread out over a wide area with surrounding coral reefs, and attract a wide variety of species.

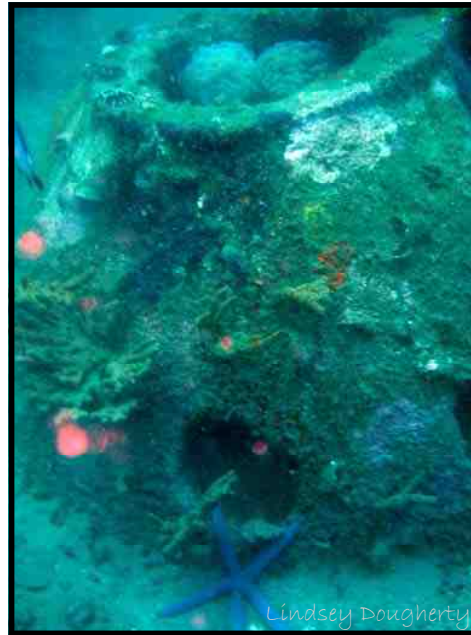
Examples of Species Found Here:

- Pinnate Batfish
- Giant Cuttlefish
- Barramundi
- Orangutan Crab
- Spotted Toby
- Triggerfish
- Strapweed Filefish



3

Reef Balls



The Reef Balls were installed during May of 2003. They provide shelter and protection to fish and other organisms, and schools of small fish have occasionally been found inside them.

Examples of Species Found Here:

- Ornate Ghost Pipefish
- Mantis Shrimp
- Striped Catfish
- Broadclub Cuttlefish
- Boxer Shrimp
- Common Lionfish
- Moorish Idol



4

Wreck



The wreck was sunk during December of 2007. Although the structure of the ship has deteriorated, many species are found here including a school of resident sweetlips.

Examples of Species Found Here:

- Sweetlips
- Squid
- Common Lionfish
- Three-Spot Squirrelfish
- Balloonfish



5

Fish Net



The fish net was installed during July of 2009 and has two resident spadefish. The structures used to hold the net are home to many small fish and cleaner shrimp.

Examples of Species Found Here:

- Spadefish
- Nudibranchs
- Cleaner Shrimp
- Ribbon Eels
- Common Lionfish





@ Night

The house reef is also great for night dives!



Types of Species Found During Night Dives:

- Octopus
- Nudibranchs
- Bobtail Squid
- Anemone Hermit Crab
- Tiger Shrimp



Other species found on the house reef:



Thanks for your support and your interest in our project!