

# Traffic Barge

The Traffic Barge was so named because there were several concrete traffic barriers (Jersey Barriers) that were sitting on top of the barge when it was deployed in December 1993. It sits upright in 60 feet of water in the Donaldson Permitted Area.

There is very little documented data on the Traffic Barge prior to the 2004 Monitoring event. Having done many dives on this barge over the years as both a spearfishing and training site, we of the F.O.S. Dive Team have noticed very little change over the last 4 years. As far back as we can remember the Steel hull has been mostly intact with about 1/3 of the deck plates missing on the West side. The Jersey Barricades are stacked about 7 feet high on the Northwest corner of the barge. Both the barge and barricades are very heavily encrusted with Benthic organisms and it would be easier to list the species of Fish that we don't see than listing the ones we do.

During a routine dive back on October 2003, pictures were taken that showed the presence of the invasive *Caulerpa brachypus* Alga on and around the Traffic Barge. The pictures and the story were in the local paper a few days later and the findings were reported to F.D.E.P. and Harbor Branch both of whom conducted a fact finding mission to the site.

In December 2004, members of the F.O.S. Dive Team did dives on the Traffic Barge and LC-6. The Traffic Barge seemed undamaged by either Hurricane but the Jersey Barrels are no longer stacked but scattered about on the Northwest corner.

# Florida Oceanographic Society Research Dive Team

Florida Fish & Wildlife Conservation Commission Monitoring Grant

## "Artificial Reef Stability Assessment Survey"

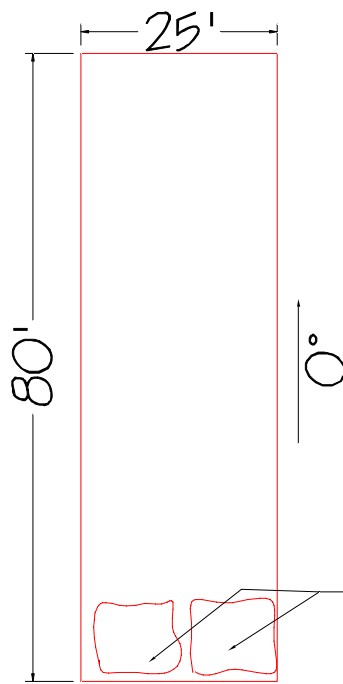
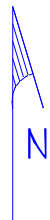
Martin County Florida

### "Traffic Barge"

Date of Survey: April 24, 2004

Research Divers: Frank Evans, Ken Flerx, Mike McGinnis, Merle Stokes

<b>Reef Material: Steel Barge</b>
<b>Orientation: East and West</b>
<b>Bottom Composition: Sand and Shell</b>
<b>General Condition of Material: Fair</b>
<b>Collapse: 20% of the South deck has collapsed. The rest of the barge is intact.</b>
<b>Scattering: None noticed.</b>
<b>Disintegration: With the exception of the South deck the steel barge shows very little deterioration.</b>
<b>Additional Observations: The Traffic barge still looks like a barge. There is a large stack of concrete "Jersey Barricades" on the S.W. corner of the barge. Heavy Benthic growth is present.</b>



Areas where deck metal is missing

"Traffic Barge"  
Mapped  
04-24-04  
Drawn by BS  
11-28-04

## Traffic Barge

Survey Date: 26 February, 24 April, and 29 May 2004

Benthic species listed below were identified using digital still images. Professionally trained divers spent 90 minutes (30 minutes each survey date) on the Traffic Barge photographing benthic invertebrates and macroalgae. All species were documented (to lowest recognizable taxon) and verified using reference guides. Some of the most relevant guides for the Martin County area include: 1) Littler and Littler's Caribbean Reef Plants: An Identification Guide to the Reef Plants of the Caribbean, Bahamas, Florida and Gulf of Mexico, 2) Hendler, Miller, Pawson and Kier's Echinoderms of Florida and the Caribbean: Sea Stars, Sea Urchins, and Allies, and 3) Paul Humann's Reef Creature Identification: Florida Caribbean and Bahamas. documented organisms were also placed in one of the following abundance classifications for long-term analysis: Single (1), Few (2-10), Many (11-100) or Abundant (>100).

<u>Benthic Species Identified</u>	<u>Abundance</u>	<u>Comments</u>
<b>Green Algae</b>		
<i>Caulerpa brachypus</i> (attached)	Abundant	Low density, but sprawling.
<b>Red Algae</b>		
<i>Rhodymenia</i> sp.	Abundant	
<i>Asparagopsis</i> sp.	Few	Scarlet red tufts of algae approximately 2 cm tall.
<b>Sponges</b>		
Black ball sponge ( <i>Ircinia strobilina</i> )	Single	
Vase sponge ( <i>Ircinia campana</i> )	Single	
Encrusting sponge	Many	
Unidentified sponge (Demospongiae)	Single	
<b>Worms</b>		
Bearded fireworm ( <i>Hermodice carunculata</i> )	Single	
<b>Gastropods</b>		
Octopus	Single	
<b>Cnidarians</b>		
Mat anemone	Single	
Branching hydroids	Abundant	
Feather hydroids	Abundant	
<i>Leptogorgia</i> sp.	Single	Bright yellow sea whip (maybe <i>L. virgulata</i> ).
Regal sea fan ( <i>Leptogorgia hebes</i> )	Few	
White telesto ( <i>Carijoa riisei</i> )	Few	
Star coral	Single	
<b>Tunicates</b>		
Compound tunicates ( <i>Eudistoma</i> spp.)	Many	

