Pipe Barge

The Pipe Barge was named because it was literally covered in Steel pipes prior to its deployment on September 13, 1990. It sits upright in 60 feet of water in the Donaldson Permitted Area. It is now 15 years old.

Due to it's unique shape and the fact that it was covered with pipes, The Pipe Barge was the only barge that we were able to identify in the pre-deployment pictures that we found in the Martin County archive. We have included these pictures from 1990 with these pictures that were taken on May 22, 2004 for a comparative view.

Members of the F.O.S. Dive Team did a dive on this site 6 months after it was deployed and found it to be in very good condition with the Steel pipes scattered and piled on all sides. There was little Benthic growth at that time but lots of Fish.

Currently the Pipe Barge is still in fairly good condition but it is starting to show signs of deterioration on the side panels and deck plating. It is now heavily encrusted. For whatever reason, the Steel pipes are now mostly present on the East side of the barge. Two of the tall Spuds are still intact and attract a lot of Fish. Perhaps this is because they sit higher up in the water column.

Florida Oceanographic Society Research Dive Team

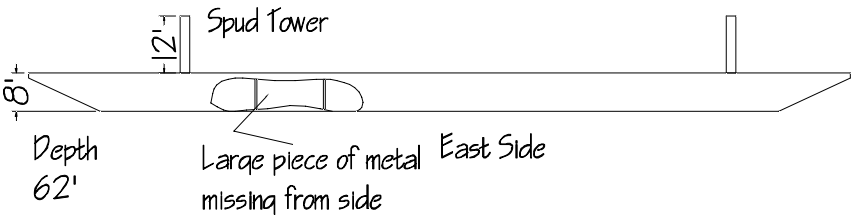
Florida Fish & Wildlife Conservation Commission Monitoring Grant

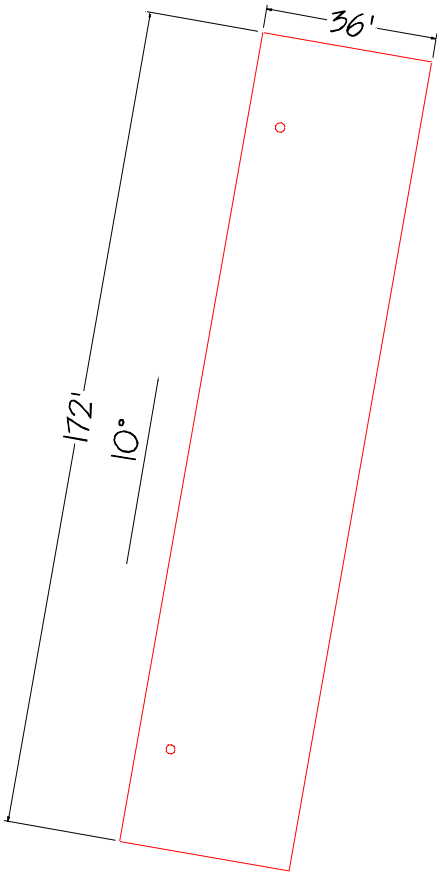
"Artificial Reef Stability Assessment Survey"
Martin County Florida

"Pipe Barge

Date of Survey: May 22, 2004
Research Divers: Dan Brady, Bill Goble, Doug Raynor, Wayne Turner

Reef Material: Steel Barge
Orientation: North and South
Bottom Composition: Sand and Shell
General Condition of Material: Fair
Collapse: None Noticed
Scattering: The steel pipes that were on the barge when it was
deployed have all scattered mostly to the East. The Barge itself has
not scattered.
Disintegration: Some of the deck is disintigrating. One large piece
on the East side is missing.
Additional Observations: The "Spud Towers" are standing
upright and are attracting a lot of Fish. Heavy Benthic encrustation.





"Pipe Barge"
Mapped 05-22-04
Drawn by BS 11-27-04

Pipe Barge

Survey Date: 22 May 2004

Benthic species listed below were identified using digital still images. Professionally trained divers spent 30 minutes on the Pipe 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).

Benthic Species Identified	Abundance	Comments
Green Algae		
Caulerpa brachypus (attached)	Abundant	Low density, but sprawling.
Codium sp.	Many	
Red Algae		
Rhrodymenia sp.	Abundant	
Asparagopsis sp.	Few	Scarlet red tufts of algae approximately 2 cm tall.
Sponges		
Black ball sponge (*Ircinia strobilina*)	Few	
Vase sponge (*Ircinia campana*)	Few	
Stinker sponge (*Ircinia felix*)	Single	
Encrusting sponge	Abundant	
Cnidarians		
Branching hydroids	Abundant	
Feather hydroids	Abundant	Associated with *Rhodymenia* sp.
Regal sea fan (*Leptogorgia hebes*)	Many	
Anemone	Abundant	
White telesto (*Carijoa riisei*)	Few	
Crustaceans		
Hermit crab	Single	
Arrow crab (*Stenorhynchus seticornis*)	Few	
Bryozoans		
Yellow calcified bryozoan	Abundant	
Encrusting bryozoans	Few	Associated with *Rhodymenia* sp.
Sea Urchins		
Purple urchin (*Arbacia punctulata*)	Single	
Tunicates		
Compound tunicates (*Eudistoma* spp.)	Abundant	
Colonial tunitcates	Many	Looks similar to *Clavelina* spp.

Florida Oceanographic Society Research Dive Team

FPL Artificial Reef Fish Census Database

Species	Species Abund	Species Number	Species Method	Species Area	Species Size	Date	County	Latitude	Longitude	(F) Temp	(Ft) Depth	# Of Dive	Participating Divers	Bot Time Min	(Ft) Vis	Photo	Video	Reef Name	Reef Materials	Years Reef Age	Reef Tons	Reef Ft Prt Sq Ft	Reef Relief (Ft)	Deploy Date
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Angelfish, Blue	F	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Barracuda, great	F	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Butterfly fish, reef	F	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Grouper, Gag	M	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Grouoper, Goliath	F	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Grunt, Bluestriped	A	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Hogfish, Spanish	F	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Margate, Black	F	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Snapper, Gray	M	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Snapper, Red	M	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Porkfish, spp	M	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Scorpionfish	F	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Shark, Nurse	S	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Soapfish, spp	F	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Spadefish, Atlantic	F	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Triggerfish, Gray	M	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990
Grunt, Tomtate	A	N/A	RD	N/A	N/A	5/22/2004	Martin	2713.364	8006.959	70	62	4	FOS-db/bg	45	15	yes	yes	Pipe	Steel barge	14			8	9/13/1990