#### Clelia 614

Pilot: Don Liberature Obs 1: Chris Koenig Obs 2: Jennifer Arcuri

Date: 09/02/01 Visibility: 40' Depth range: 300' Time: 10:30-14:00 **Sebastian 614** 

**Objectives:** Fish assessment, Filming and Evaluation of 2000 Restoration Trials/Reefballs

**Habitat:** The Sabastian area surveyed consists of large rolling dunes/ridges with about 100% dead Oculina rubble covering them. One small isolated live Oculina head was seen on the peak of a ridge. The entire area looks very desolate until one comes upon the reefball sites.

#### **Invertebrates:**

- Many black long spined urchin were seen over the whole area and on the reefballs.
- A beautiful white/lime green stalked anemone (Cerianthid) was observed standing all alone on the peak of a ridge.
- A sea spider (Pychnogonid) found a home on one of the reefballs.
- A few brittle stars (Ophiuroidea) were scattered throughout the area.

### **Human Impacts:**

• at least 5 track-type marks were seen

#### \*Restoration sites:

- Many of the fish species seen on this dive inhabited these sites (B1a,b,c):
  - -One reefblock site had no live Oculina but good fish habitat
  - -Reefball B1a had a coral transplant still on it that was partially alive.
  - -At site B1b, 7 reefballs were seen in same area. No live coral was observed.
  - -A broken part of one of the reefdisks (PVC pipe) was found on top of a slope all
- alone. No other disks were found in this area. Some track-type marks were observed.
  - -At another site there were 20 reefballs. 3 reefballs were observed closely. Of the
- 3 one had no live coral growth, one had possible live coral growth, and the 3rd had live Oculina.

#### Fish:

Overall fish abundance was low for the Sabastian area except for around the reefball sites.

- The Anthiids heavily occupied the reefballs and reefblock area. Holacanthus bermudensis were only seen around these areas.
- A group of 10+ Seriola dumerili and Seriola rivoliana followed the sub throughout the dive.

# **Commercially Important Species**

- **4 Mycteroperca phenax** A few Mycteroperca phenax were spotted at most of the reefball sites. The largest of the Mycteroperca phenax observed occurred on the reefball site with the most balls (20). There were 2 males. One put on a greyhead display probably as an act of aggressive behavior towards the other.
- **3 Mycteroperca microlepis-** A large male Mycteroperca microlepis came to greet the sub upon descent high in the water column. Other gag were spotted around the ridge slopes.
- **1 Epinephelus niveatus** This snowy was seen inhabiting the reefblock site.

**Other Species Observed**:

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	Acanthurus sp.		Equetus lanceolatus		Paralichthys sp.
A	Anthiinae		Equetus sp.	S	Plectranthias garrupellus
	Apogon sp		Equetus umbrosus		Plectrypops retrospinus
	Bodianus pulchellus		Equetus iwamotoi	S	Pomacetrus sp.
S	Centropristis ocyurus		Gymnothorax moringa		Priacanthus arenatus
	Centropristis striata	M	Halichores bathyphilus	S	Pristigenys alta
	Centropristis fuscula		Halichores sp		Rypticus maculatus
M	Chaetodon aya	M	Hemanthias vivanus		Scorpaena
	Chaetodon ocellatus	F	Holacanthus bermudensis		Serranus flaviventris
F	Chaetodon sedentarias		Holacanthus ciliaris	M	Serranus phoebe
	Chaetodon sp.	A	Holanthias martinicensis	M	Seriola dumerili
	Chromis cyanea		Holocentrus adscensionis	F	Seriola rivoliana
M	Chromis enchrysurus		Holocentrus sp.		Synodus sp
	Chromis scotti		Labridae		Callionymidae
	Decodon puellaris		Liopropoma eukrines		Canthigaster urosticta
	Diplectrum formosum		Ogcocephalus sp.	S	Canthigaster sp

## **Good shots:**

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Snowy grouper as well as many small Anthiids have made this a home. 11:19Rt...52:16tape 614-1.mpg 614-1.jpg 2. Isolated live coral colony on top of a ridge. Fish associated with it are Anthiids, Butterflyfish, Yellowtail reeffish, and Greenband wrasses. Bank 11:29RT...01:02:57tape 614-2.mpg 614-2.jpg 3. Large female gag on ridge slope. 11:31RT...01:04:53tape 614-3.mpg 614-3.jpg 3chip2 4. Dense rubble bottom. This is what most of the area looks like. 11:53RT....20:31tape 614-4.mpg 614-4.jpg 5. 1st reefball the sub came upon. The Oculina transplant is partially alive and a variety of species are associate with this area including one small Scamp, Reef Butterflyfish and RoughTongue Bass. 54:26 tape 614-5.mpg 614-5.jpg 3chip 3 Stalked white anemone on ridge peak. 6. 12:54rt...15:27tape 614-6.mpg 614-6.jpg 7. Isolated PVC pipe from missing disk site. 13:11RT... 32:58tape 614-7.mpg 614-7.jpg 8. Barren ridge area 13:15RT....36:43 614-8.mpg 614-8.jpg 9. Large greyhead phase scamp in the 20 reefball site showing an aggressive display another large male in the area. to 13:28RT....49:39 tape 614-9.mpg 614-9.jpg 10. Track-like markings in rubble 13:04....25:35tape 614-10.mpg

Reefblock site with heavily encrusted attached buoy. No live coral seen here.

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