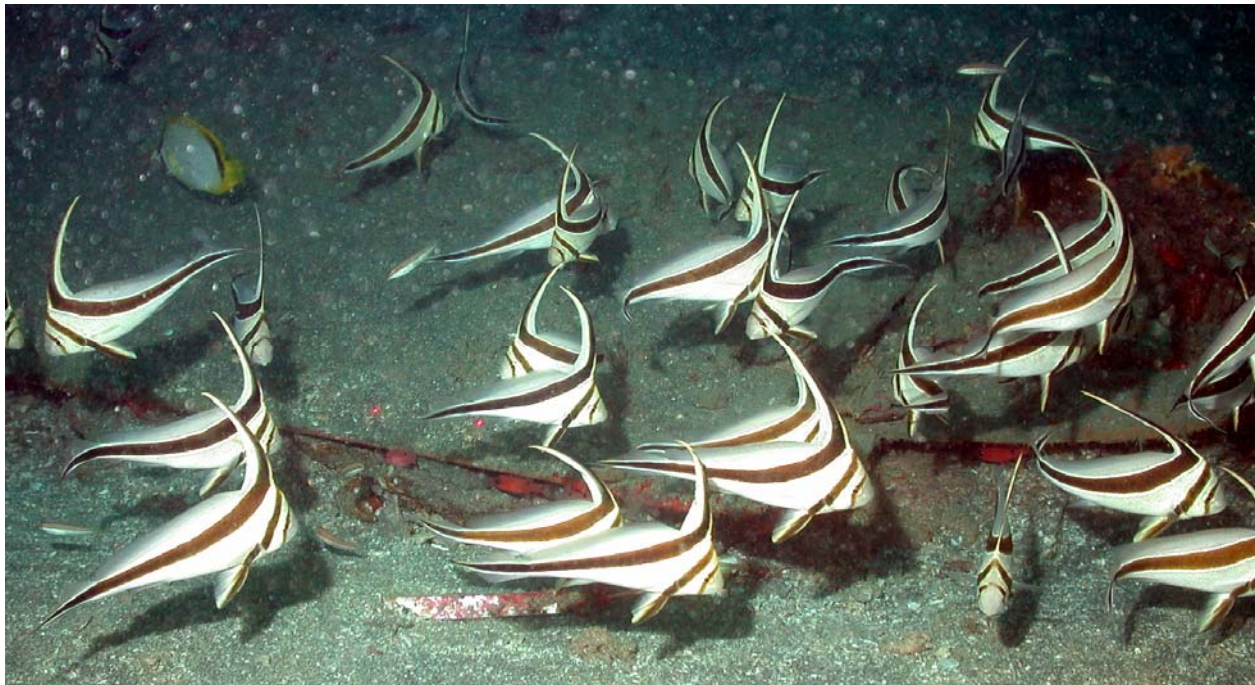




**NOAA Teacher at Sea
Robert Lovely
Onboard NOAA Ship GORDON GUNTER
March 31 – April 12, 2008**

NOAA Teacher at Sea: Robert Lovely
NOAA Ship: GORDON GUNTER
Mission: Document Fish/Coral Associations at Pulley Ridge and the West Florida Shelf
Date: April 10, 2008
Geographical area of cruise: Gulf of Mexico



A school of jackknife fish (*Equetus lanceolatus*) captured by the ROV over the West Florida Shelf.

Weather Data from the Bridge

Visibility: 12 miles
Wind Direction: 120 degrees
Wind Speed: 16 knots
Sea Wave Height: 2-3 foot
Swell Wave Height: 3-4 foot
Seawater Temp.: 22.1 degrees C.
Present Weather: Partly Cloudy

Science and Technology Log

Today we made three ROV dives on the West Florida Shelf, roughly 100 miles off the west coast of Florida. After



A bank sea bass (*Centropristis ocyurus*) tucked in under one of the rock outcrops along the West Florida Shelf.

making our usual CTD profile (see Ship's Log, April 4, 2008) at about 0730, we lowered the ROV to a depth of 262 feet and followed a transect bearing southwest. The object was to



A blue angelfish (*Holacanthus bermudensis*).

conduct a fish survey with respect to species presence and abundance as a function of bottom habitat types. Essentially, we were looking for good hard-bottom fish habitats within an area being proposed to the Gulf of Mexico Fishery Management Council as a new Marine Protected Area (MPA).

Each of the video transects revealed a mix of sand and hard bottom, with fish most abundant in areas having some topographic relief. Numerous hard rock outcrops offered attractive habitat for a wide variety of reef fish, such as scamp (*Mycteroperca phenax*), red pogy (*Pagrus pagrus*), red snapper (*Lutjanus campechanus*), almaco jack (*Seriola rivoliana*) greater amberjack (*Seriola dumerili*), short bigeye



A sea star (Class: Asteroidea) on the sand flats between reef outcroppings.



A short bigeye (*Pristigenys alta*) ready to dart into his hole on the sand flats.

(*Pristigenys alta*), bank butterflyfish (*Chaetodon aya*), great barracuda (*Sphyraena barracuda*), red grouper (*Epinephelus morio*), blue angelfish (*Holacanthus bermudensis*), creolefish (*Paranthias furcifer*) saddle bass (*Serranus notospilus*) bank sea bass (*Centropristis ocyurus*) and many others.

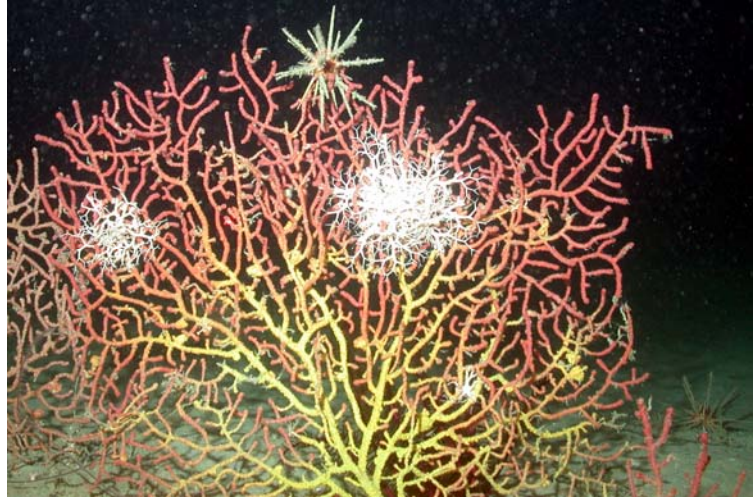
The sand flats in between ridges and reef outcroppings provided a stark contrast in terms of fish abundance. Over these areas the ROV would glide for minutes at a time without revealing many fish. But even in these less productive bottom habitats we would see the occasional fish dart into its hole as we passed over.

We also saw other common sea creatures, such as gorgonians, wire coral, basket stars, sea stars, feather sea pens, sea urchins, sponges and snails.

Personal Log

The quality and abundance of food on the GORDON GUNTER is remarkable, and I find it impossible to resist (especially the deserts). I'd rather not return home ten pounds heavier than when I left, so I've been trying to visit the weight room whenever I can find the time.

During my first few sessions on the treadmill I had to hang on for dear life due to the rocking motion of the ship. It was pretty comical. Now, though, I am getting fairly good at going no-handed while compensating for the ship's motion. It requires some dexterity, but it's great practice for getting your sea legs.



Basket stars (Order: Phrynophiurida) spread their plankton nets near the top of a gorgonian.