

Gulf SERPENT Newsletter – November 2008



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This is the first issue of a monthly newsletter from the Gulf SERPENT Project. We want to use the newsletter as a vehicle to ensure better communication between our office and our offshore partners. This past summer has been a very productive one. Data collection occurred frequently at almost all our sites and the observations contained some truly amazing footage. The challenge we face after Hurricanes Gustav and Ike is to reinvigorate our data collection activities at all sites.

1. Summer Student Internship

This summer we hosted our second summer student intern – Ms. Dani McHugh from the University of Maine at Mathias. Dani visited Thunder Horse, the DDII, and the Deepwater Horizon. Thanks to all aboard those facilities for their hospitality and cooperation. Dani did a great job and next year we look forward to another new intern.



Dani McHugh Offshore

2. 2008 Highlights Video Released

At the end of October we released the first video documenting highlights from our 2008 missions. That video has become amazingly popular. If you haven't seen it yet, you can watch it online at http://zooplankton.lsu.edu/serpent_news.htm. There is also a link that will allow you to download the full resolution file (but it's big ... 105 megabytes). If you would like a copy of the video on a CD because you don't have access to a high speed internet connection, you can email us at: gulfserpent@gmail.com and we'll send you one.



Check out our video!

3. Gulf SERPENT Website

The Gulf SERPENT website is progressing. We'll add more content over the fall and hope to have links to all our sites by the end of the year. You can visit us at <http://zooplankton.lsu.edu/serpent.htm>

4. Data Collection

After a busy and productive summer, we were hit by two hurricanes – Gustav and Ike. Both storms caused substantial damage offshore and not unexpectedly, SERPENT data collection ceased while operations focused on reconstruction and repair. The challenge we face now, is to return to regular data collection. Restarting routine SERPENT activities is a project priority as we've now gone two months without any surveys. **Please help us by conducting regular SERPENT dives whenever time permits.** Opportunistic observations are also important. If you see something interesting, try to collect some video of it. You never know, you may be the first person to observe something truly new!

5. Recent Sightings

Although we haven't had received any dedicated surveys since the summer, we did receive an interesting observation from Lynn Durmon aboard Holstein. While running through some checkout dives, they spotted an unusual fish and sent in some still images followed by a short video. The strange looking creature is a relative of the sharks and rays called a chimaera (ki-meer-ah). This one is called the spearnose chimaera (*Rhinochimaera atlantica*) and its depth of 4340 feet appears to make it the deepest record of this species in the Gulf. Here's a great example of an opportunistic observation and our first data from Holstein. Thanks to Lynn and the Innovator team at Holstein!



Sparnose chimaera below Holstein in October, 2008.

6. Creature Feature

One of the unusual invertebrate animals we observe are colonial organisms that called **pyrosomes**. These animals often resemble a hollow cucumber that drifts through the water with little apparent direction. Pyrosomes are actually quite common and are primitive ancestors of animals with backbones.

Their bodies consist of a jelly-like material within which, individual animals (called zooids) are embedded. The colony is closed at the front (rounded end) and open at the blunt back end. Individual zooids obtain food by pumping water through their 'mouths' into their bodies where they filter out small particles. Water is expelled through the back end of the colony giving them a slow, water-jet propulsion.

Some colonies contain an unusual species of fish (which we've never seen in the Gulf but would really like to find!) Most colonies have a small shrimp or other crustacean living on them. Take a look at the pictures below. The small object attached to the underside of the pyrosome from July 25, 2008 is a hyperiid amphipod. Most pyrosomes are about a foot long, but some can up to 12 feet in length! Many pyrosomes are bioluminescent and can produce a bright blue light.



Ocean Confidence: Mar 8, 2007



Thunder Horse: Jan 17, 2008



DDII/Atlantis: July 25, 2008



DDII/Atlantis: July 26, 2008

7. SERPENT Data Collection Statistics

The following graphs summarize data collection activities supporting Gulf SERPENT for Q1 (Jan – Mar), Q2 (Apr – Jun), and Q3 (Jul – Sep) 2008.

