Tagging Whales in the Antarctic Seas

By Linda Prescott

Colin Ware and Roland Arsenault were part of a six-week NSF-Duke University Antarctic Whale Tagging trip this past spring. The purpose of the trip was to apply suction cup tags ("dTags") to humpback whales to measure underwater movements and foraging behavior, and to quantify the prey (primarily krill) consumed by humpback whales.

On April 21st, the group left Punta Arenas, Chile and arrived at Palmer Station, Anvers Island three days later. The station became their base camp for the next six weeks, while ship-based teams conducted visual observations and krill patch surveys using ADCP, CTD, and sampling nets; and Zodiac-based teams conducted dTag deployment and retrieval (11 dTags were deployed), and completed acoustic krill patch studies and physical krill sampling. The data were fed into 3d visualizations and into a geodatabase to understand how these datasets interact.



Colin Ware (left) and Roland Arsenault (kneeling) pose with teammates at Paradise Bay, Antarctica. Image courtesy of Yiwu Zhou.

Krill predators, like the humpback whale, are vulnerable to variability in prey availability. The data obtained will provide important information that will help to better understand predator-prey ecology.

The science party arrived back in Punta Arenas on June 11th. In addition to witnessing some of the densest aggregations of humpback whales ever recorded, the group also found time for some snowball fights, sledding and creative photography.

For more information about this cruise, including a blog and a photo album, check out www.nicholas.duke.edu/antarctica. 🙏



Colin and Roland's research vessel, the LM GOULD is dwarfed by an iceberg as it glides through icy seas. Image courtesy of Colin Ware.

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AUV Boot Camp

By Linda Prescott

In early June, a week of Gavia AUV training, operations and data processing took place, both at CCOM and at Mendum's Pond in Barrington, NH.

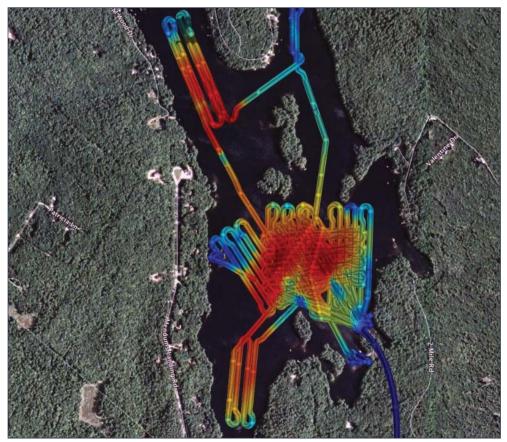
Tom Weber and Jon Hunt deployed and tested two underwater acoustic tracking buoys. These systems combine very precise RTK GPS with acoustic modems and other ancillary sensors allowing one to track and talk to the AUV while it is deployed.

The weeklong "AUV Boot Camp" also included classroom training. Tom Hiller of GeoAcoustics focused on the GSt and GeoTexture software suites for processing the Gavia's GeoSwath bottom mapping sonar data. Rich Patterson and Chuck Honing, both of Kongsberg, joined the training group as well, and Erin Heffron, product specialist for IVS 3D, provided a demo of the newly released Fledermaus



Val Schmidt and Art Trembanis preparing to deploy at Mendum's Pond.

Kurt Schwehr and Lee Alexander, who are developing an Automatic Identification System (AIS) message for AUVs, were also on hand; they are developing a software interface to the Gavia control system, allowing real-time broadcast of AIS messages based on the AUV's (estimated) position. 🙏



Geoswath multibeam bathymetry of Mendum's Pond collected by the Gavia AUV.

Nippon Foundation GEBCO News

In July, GEBCO students Guillermo Diaz Pena and Felipe Barrios Burnett sailed from Seward to Kodiak, AK aboard NOAA ship RAINIER, as part of the Nippon Foundation program. They were part of a team surveying near the Pavlof Islands on the SW Alaskan Peninsula. Guillermo left Alaska and headed for Tokyo where he visited the Japan Coast Guard Hydrographic and Oceanographic department to study Electronic Navigational Charting. Felipe's next trip as part of the GEBCO program was to Mississippi, to the Naval Oceanographic Office (NAVOCEANO) at the Stennis Space Center. From there Felipe will head home to Chile and Guillermo will be going home to Colombia.



Felipe aboard the NOAA ship RAINIER in

Fellow GEBCO students Kentaro Kaneda (Japan), Anastasia Abramova (Russia), Rachot Osiri (Thailand) and Christina de LaCerda (Brazil) are finishing up summer lab visits/research cruises and are also heading home. We wish all of the 2008-09 GEBCO students the best in their future endeavors.

The incoming 2009-10 GEBCO class will be: Naoto Ujihara (Japan), James Daniell (Australia), Bernice Mahabier (Suriname), Athur Herwindya (Indonesia), Frances Freire (Phillipines) and Yulia Zarayskaya (Russia). †

Kentaro analyzing chirp data on board the USCGC HEALY. Photo source: Jon Pazol



By Briana Sullivan

CCOM has been using RSS for a couple of years now. This article is not only a reminder to everyone about the feed, but it also helps answer that burning question...what is RSS?

RSS stands for Really Simple Syndication. RSS is the latest and greatest way to quickly inform people of changing items of interest on any webpage. Instead of having to visit websites to find their latest news, you can subscribe to an RSS feed that will bring the news to you!

CCOM's RSS feed includes upcoming seminars, recent news items and articles. Currently, the CCOM/JHC home page online is reading the RSS feed that is being sent out. So, if you don't have a feed reader or don't want one, you can just hop onto the home page to view it.

However, if you would like to subscribe to the feed, you can do so by clicking on the RSS logo in the web address bar or scroll down and click on the RSS image RSS at the bottom of the page. You can also type this web address: http://ccom.unh.edu/rss/ccom_rss.xml.

When you click on the link (or follow the URL), you can then "subscribe" to the feed. There are a few different ways to read a feed:

- via the web browser of your choice
- via a web browser add-on
- via an online feed aggregater
- via a desktop application

The web browser is a quick and simple way to view a feed without subscribing to it. Firefox has a web browser add-on called SAGE that has a leaf icon . When the add-on is installed, you can click the leaf and the feeds will be displayed in a side window in the browser.

There are numerous online feed aggregators to choose from; you can get an online account then login when you want to view your feeds. A list of the top 10 can be seen at http://email.about.com/od/rssreaderswin/tp/top_rss_windows.htm. There are numerous desktop applications that will allow for feed reading/subscribing. These are downloaded and installed just like normal desktop applications.

Now that you are at least somewhat familiar with what a feed is and how to access the CCOM/JHC feed, we hope you will subscribe and follow all of the latest CCOM/JHC adventures via the feed! $\mathring{\bot}$

Wiki Quickies

By Briana Sullivan

Wiki. It's such a funny name—makes me think of lawn chairs! But seriously, the wiki is more than just a funny name. Thanks to the efforts of Kurt, Val, Brian, Ben and the like, we now have an abundance of CCOM/JHC-specific knowledge at our fingertips—all we need to know is what to type! This new section, "Wiki Quickies," will be a periodic reminder of how to use the wiki to its full potential and a place to highlight wiki pages you may never have known existed!

So join us in the wonderful world of wikis and find out more about information you never knew you needed!

Quickie Tip: SEARCH, Search, search!

Don't try to navigate the wiki pages like normal web pages. Instead, head straight for the search box (in the left column) and type in what you are looking for—chances are your needed info will be in the results. If not, you will be given a link to follow to start a new wiki page on the search you gave. Don't be shy about creating and adding content after a thorough search either—that's what makes the wikies so wonderful!

Quickie Feature: Word Help

Ever compose a cruise report then notice that the formatting is all wrong and the page seems to be a funny size? Or maybe are having trouble making the table of contents do what you wanted for that thesis you've been working on for the past 4 years! Well, "Word Help" is here.

In an effort to compile and organize the word problems encountered here at CCOM/JHC, Briana has started the Wiki Word Help page to do what no animated office assistant can—HELP! Check it out (http://wiki.ccom.unh.edu/index.php/Word_Help) as it is constantly evolving. And if you have any word issues of your own, please add to the page so we don't have to feel your pain!

Don't forget, your best bet when dealing with formatting issues is to show all marks and symbols and text boundaries (CTRL+SHIFT+*). Knowing what you're dealing with is half the battle!

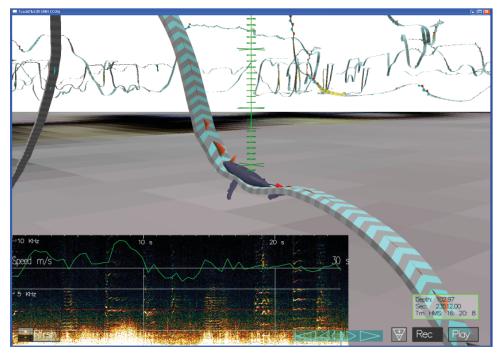
Quickie Feature: Established Geodetic Marks

These are places in the local area that have been marked in some permanent way and then surveyed with a geodetic GPS. Val Schmidt has started a list of Established Geodetic Marks on the CCOM Wiki at http://wiki/index.php/Facilities (see the list at the bottom of the page).

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New Grant

Colin Ware and Greeneridge Sciences, Inc. have been awarded a grant by the Office of Naval Research (ONR) for the project, "Tools to compare diving-animal kinematics with acoustic behavior and exposure." The project's goal is to develop software tools for rapid and comprehensive analysis of diving-animal kinematics, particularly with comparison to vocalization behavior and acoustic exposure.



The screen capture above shows a humpback whale in Antarctica just about to make a lunge. The pattern in the sound spectrogram is the typical signature of a lunge.

Student Orientation

On Friday, August 28th, new students were welcomed during the CCOM orientation program in the Video Classroom. 🗘



Pictured, left to right: Jim Gardner, Research Professor; Francis Freire, GEBCO-Philippines; Naoto Ujihara, GEBCO-Japan; Athur Herwindya, GEBCO-Indonesia; Dave Monahan, Associate Professor and GEBCO program coordinator; Bernice Mahabier, GEBCO-Suriname; James Daniell, GEBCO-Australia; Sean Denney, Ocean Engineering Master's Program.

Administrative Notes



Manchester-Boston Regional Airport Parking

Page

As of September 1, the Manchester-Boston Regional Airport will no longer waive parking fees for University System employees traveling on official business. Airport parking is available at the Highlander Inn and Conference Center at a rate of \$7.00 per day, which includes complimentary 24-hour shuttle to/from the airport. Contact the Highlander directly at 603-625-8853 or see Linda Prescott for details.



Filling Out a Pre-Purchase or Travel Form

Please keep in mind that each purchase receipt or authorization form is reviewed by Business Services and must contain the five Ws:

- Who the purchase was made for,
- What was purchased,
- When the purchase was made,
- Where the item was purchased, and
- Why it was purchased.

Everyone at CCOM may know what an "XYZ Widget" is used for, but it may not be apparent to Business Services. If the purchase is under \$100.00, and a prepurchase authorization is not required, please include the "what and why" in your email request to Abby, Maureen or Linda.

Some examples: Instead of "ABC part for xxx project," include more detail: "ABC part for XXX equipment used in XXX project with John Doe."

The five Ws are also required for travel claims. Instead of writing that you attended a "meeting in Kalamazoo," add "with John Doe and Jane Smith of Any Corp. to discuss xxx research project." If you are attending a conference, please attach a page from the conference website showing the conference purpose and/or topics. The more details you can provide, the faster the forms can be processed.

Congratulations!

On May 14, **Matt Plumlee** and his wife, Melissa, welcomed their first child, a baby girl. In July, the proud daddy brought his new daughter in to CCOM to meet everyone. Congratulations Matt and Melissa!

CCOM Office Assistant Samantha Benton has been accepted into the McNair Scholars internship program at UNH for the 2009-2010 academic year. Students in this intensive academic honors program are nationally recognized as dedicated students who have taken extrasteps in preparing themselves for graduate school. Samantha is beginning her senior year and has a dual major in Spanish and Social Work. She recently traveled to the Dominican Republic where she helped build a community center as part of a student volunteer program.

On July 31st, Janice Felzenberg successfully defended her Master's Thesis, "Detecting Bedform Migration from High-Resolution Multibeam Bathymetry in Portsmouth Harbor, NH." She has accepted a position as a Hydrographic Technology Project Specialist with the NOAA/NOS/OCS Hydrographic Systems and Technology Programs.



Yifty and Janice.

Now that she has finished her Master's degree, Janice will have time to start plannning her June 27th, 2010 wedding to Yiftach Eisenberg.

Welcome New Students

Two new graduate students arrived at CCOM in late August. Sean Denney graduated with a BS in Geomatics from the University of Florida, and Dandan Miao received a BS in Geographic Information Systems from Wuhan University, China. Welcome Sean and Dandan!



New student Dandan Miao.

Getting to Know You

In an effort to get to know our newest staff members, we asked Emily Evans and Jordan Chadwick a few question. Emily is working with Ben Smith as relief captain and Jordan is our new Information Technologist III.

Emily

Jordan

Educational and/or work background?

I came to CCOM from 3 years aboard the NOAA ship Fairweather in the deck department. Prior to that I worked aboard traditional schooners for five years. I graduated from UNH with a B.A. in History. I worked in the IPv6 consortium at the IOL, and more recently as a Network Administrator in a credit card services company.

Where did you grow up?

Williamson, NY—a small town on the shore of Lake Ontario between Rochester and Syracuse.

I grew up in Dover, NH.

Any hobbies?

I haven't found a whole lot of time for hobbies other than reading recently, but in a perfect world swimming, sailing, biking, hiking and pottery. I like to hike, run, read, play golf, and try to keep up with technology news.

Favorite vacation that you've taken?

I spent 2 weeks backpacking in the Virgin Islands once which was lovely, but really, any vacation is good.

My honeymoon—my wife and I went to San Juan, Puerto Rico.

A place in the world that you would like to visit?

Sadly, I have never done much traveling, but hope to backpack through Europe some day.

I've always wanted to travel to Eastern Asia—Japan and China specifically.

Favorite ice cream flavor?

If I have to narrow it down to just one, chocolate.

I can't pick just one: banana, Cherry Garcia, and black raspberry are my favorites.



CCOM Family Page

"Capt'n" Trey got a taste of the sailing life for two weeks in July during the Sullivan family's annual sailing trip.



With the help of shipmates Briana, Pete and Cambyr, Trey was able to safely navigate the waters from Newburyport, MA to Provincetown, down to Cutty Hunk Island and back again!

There were a few peaceful moments on board with calm seas and a couple of times when the winds blew

with near gale force, but they survived to tell the tale. Now back at work and school, they are truly enjoying some rest at last. \updownarrow





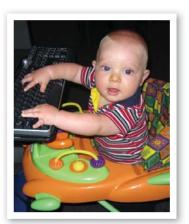
KAVI TAKES A BITE OUT OF HIS BIG APPLE!



GRACIE ROCKS SOME TRULY AWESOME STRIPED SOCKS!



PERRIN AND LANDER HANG OUT WITH A HUGE, FURRY FRIEND.



TREY WORKS TO MEET A DEADLINE.



CAMBYR HITS THE SLOPES

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This issue's banner graphic, "Isles of Shoals," is courtesy of the 2009 Summer Hydro Class.

We welcome comments and suggestions.