Tagging Whales in the Antarctic Seas
By Linda Prescott

Colin Ware and Roland Arsenaault 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.

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

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

In This Issue
1 Tagging Whales in the Antarctic Seas
2 AUV Boot Camp
2 Nippon Foundation GEBCO News
3 Tech Talk
3 Wiki Quickies
4 New Grant
4 Student Orientation
4 Administrative Notes
5 Congratulations!
5 Welcome New Students
5 Getting to Know You
6 CCOM Family Page
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 7.

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.

Felipe aboard the NOAA ship RAINIER in Alaska.

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.

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).
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!

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).
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.

Administrative Notes

Manchester-Boston Regional Airport Parking

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 pre-purchase 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.

Student Orientation

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

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.

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.

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 pre-purchase 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.

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

Now that she has finished her Master’s degree, Janice will have time to start planning 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!

Getting to Know You

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

Emily

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.

Where did you grow up?

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

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.

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.

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.

Favorite ice cream flavor?

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

Jordan

Educational and/or work background?

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?

I grew up in Dover, NH.

Any hobbies?

I like to hike, run, read, play golf, and try to keep up with technology news.

Favorite vacation that you’ve taken?

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

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

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

Favorite ice cream flavor?

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

Kavi takes a bite out of his big apple!

Trey works to meet a deadline.

Gracie rocks some truly awesome striped socks!

Perrin and Landek hang out with a huge, furry friend.

Cambyr hits the slopes.

Save the Date for the Annual CCOM Social
Friday evening • September 25, 2009
This year we will have a potluck event in the CCOM courtyard.
More details to follow.
If you would like to be involved in any of the planning details (e.g., games) or preparations, please send Maureen an email (Mau@ccom.unh.edu).