



The Dolphin Gazette

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From the Dolphin Communication Project, Mystic Aquarium & Institute for Exploration
55 Coogan Boulevard, Mystic CT 06355

www.dolphincommunicationproject.org and www.mysticaquarium.org

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As you can see at the top of this page and to the left, DCP has a **new logo!** The swirl is

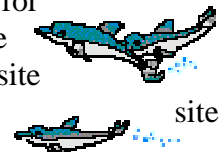
the logo for Mystic Aquarium & Institute for Exploration. The blending of dolphins leaping from the swirl represents our merge with MAIFE. We are pleased to announce the logo in this issue of

the *Dolphin Gazette*. On 1 November, the logo will debut on each page of our web site (www.dolphincommunicationproject.org). By the end of the year, we also plan to have t-shirts ready for purchase through our web site or by mail. We'll keep you posted as DCP continues to evolve and blend into the fold of MAIFE.

At MAIFE ~ along with the new logo, let us update you on an ongoing program ~

Dolphin Sense: The *Dolphin Sense* program is currently playing in the Immersion Institute Theater at MAIFE. It is ~22.5 minutes long and showcases both the Indo-Pacific bottlenose and Atlantic spotted dolphins that DCP is currently studying in both Japan and The Bahamas, respectively. This program began on 1 July 2004 while DCP researchers were in the field collecting data on dolphin communication. To link visitors and audience members more directly to our field research, we did live call-in programs twice a day: once from Japan and once from Bimini. The Education Staff at MAIFE did a superb job of coordinating our discussion about our research and the dolphins being viewed on screen with questions from visitors. *Dolphin Sense* is continuing into the fall and winter months and will be revised for our summer 2005 field season. We hope to have a live web camera link to each of our field sites and researchers. If you are local, come take a look and see how we are sharing our research and results more directly with the general public.

Internships: We offer internships to students for personal development and for college credit. Credit is arranged by each intern with their school. Internships are offered on a semester basis. Please visit the Education page of DCP's web site where there is a link directly to the college internships page on the MAIFE web



site for

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details on application and internships. Field positions are limited and only during summer months.

Referential Communication in Dolphins

Justin Gregg

Doctoral Student, Trinity College Dublin, Ireland

Justin Gregg joins DCP as a doctoral student this fall. Below is a summary of Justin's intended research topic that will



be posted to DCP's research topics page in November. We welcome Justin to DCP's fold and look forward to working with him over the next several years, and more.

Plan of Study: Justin is currently working on a graduate research degree (PhD) at Trinity College Dublin in Ireland. Together with the Dolphin Communication Project, Justin will collect and analyze data on dolphins (primarily *Tursiops truncatus*) in order to determine if referential communication is an existing component of their natural signal repertoire. Captive dolphins have been shown to understand a variety of complex referential signals given by their trainers, allowing us to posit that this kind of information might be contained within their natural signals, vocalizations, echolocation clicks or postures. Of special interest to Justin's project will be the detailed analysis of echolocation data, as this has, given the directional nature of echolocation, the greatest potential for containing referential information and the transmission of this information to con-specifics either passively or intentionally.

Background: Originally from Vermont, Justin received his degree in Linguistics from the University of Vermont in 1998, and then went on to study Sound Engineering in Dublin, Ireland. Since leaving university, Justin was involved in a variety of activities including software development, web design, jingle writing and voice over acting. Justin spends his time living in and traveling to Ireland, Holland (where my wife Ranke is from), the US and DCP's research field sites. To supplement his rather limited student income, Justin continues to find work supplying

voices for various TV and radio commercials, as well as the occasional cartoon.

Dolphin Aid from Lemonade

It all started on a Friday afternoon, on the bus ride home from school. The children (see photo) decided to have a lemonade/ice-tea stand to raise funds for their school mascot – the Dolphin. So, on Saturday morning, Megan, Becca, Colin, John, Elizabeth, Jordyn, & Sarah eagerly worked on bringing their idea to reality. They set up a couple of tables, set out cups and napkins, mixed up jugs of lemonade, ice-tea and ice-water, made signs to entice lots of business, and created beaded bracelets and key chains to sell. They even convinced their moms to bake delicious brownies and chocolate chip cookies. The kids sat out at the corner for hours, shouting to passersby to: "Come get your cold glass of lemonade for 25 cents!" "Help us adopt a dolphin!"

These children raised enough money to adopt 4 dolphins! They adopted: Juliette, Nemo, Freckles and Swoosh. DCP heartily thanks Megan, Becca, Colin, John, Elizabeth, Jordyn, & Sarah for their support.



Front Row: Megan Burke, Becca Caisse, Colin Burke. Back Row: John Correia, Elizabeth Correia, Jordyn O'Hearn, Sarah Caisse

**Thank you from
the Dolphin Communication Project!**

RIMS 2004 Field Season Summary

We spent from 11 September to 2 October on Roatan this fall. We gathered 13 hours of video and stereo audio data and ~8 hours of echolocation data with our click detector. This was a very successful season that included the southern fringes of Hurricane Ivan (and ~5 ft waves and howling winds) for 2 days during trip #1. We had 14 guests join our research teams for two separate weeks in Honduras this fall. Everyone seemed to enjoy their time and seemed to delight in documenting my antics in the water as well as the dolphins. At one point, Mika, Maury and Ronnie were targeting on my fins and would not leave my feet along. So, I put my fins in the air for ~3 min. Each set of notes were precise, through the side comments questioned my sanity and photographic technique. Of course, it was difficult for our volunteer teams not to accept the regular invitations from the dolphins to play a game of “sea grass” toss.

We were lucky enough to be present for the birth of not one, but two (!) dolphin calves. Their moms were Gracie and Carmella. The calves were born within 24 hrs of each other and (as of October 20) are still doing well. We look forward to seeing them next fall when we return to Roatan to continue our studies of this group of captive dolphins.

Presently and during the coming winter months, we are processing all videotapes for dolphin identity confirmation, pectoral flipper rubbing, and sound analyses. We will keep you posted through the coming issues of the *Dolphin Gazette* as to our results and progress.

*Kathleen M. Dudzinski, Director
Dolphin Communication Project*

Getting to Know the RIMS Dolphins

There are 18 bottlenose dolphins at the Roatan Institute for Marine Sciences: 9 females, 8 males and one calf of undetermined sex (Carmella’s calf). What follows is a brief

introduction to some of these dolphins. You will see that I refer to their personalities and use anthropomorphic terms. I do this so that you will get an idea for what I mean when discussing the dolphins, their behavior and “attitude”. While I believe some of the wild dolphin personalities are observable, we spend much more time recording the RIMS dolphins and therefore have a better “feel” for their ‘dolphinalities’.

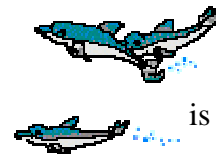
Mrs. Beasley – (AF, ~30 yrs) mom to Mr. French (born in 8/04). She has very white upper and lower lips and the trailing edge of her dorsal fin is jagged. She is independent and more interested in her calf than swimmers or trainers. She is an attentive mom.

Gracie – (AF, ~18 yrs) mom to Maury and a new calf (10/04). Gracie has a distinctive underbite and two small notches in her dorsal fin. She is very interactive with non-trainer feeders (instigating human touch). She is docile and easy-going.

Maury – (JF, 2.75 yrs) She has a slight gap between upper and lower jaws that allows her teeth to grow algae. She has grown noticeably longer in the last year. Maury is outgoing and very curious. She loves to play and often swims close to her mom.

Ritchie- (JM, ~3 yrs) son to Carmella. He has 3 small notches along his dorsal fin and many rake marks along his sides. Ritchie is excitable and always swims swiftly around people. He splits his time with Carmella and Bill & Hector. Sometimes he also hangs with Esteban.

Esteban – (AM, ~18 yrs) Esteban is one of the adult males and should be nicknamed Houdini as he regularly takes “walks” outside the pens. His dorsal fin has many jagged notches in the trailing edge and his right pectoral fin has a rectangular chunk from it. He is relatively laid-back and more playful with the calves than Paya, the other adult male.



Bimini 2004 Field Season – Summary Report

Our Season In A Nutshell:

40 Trips 81 Sightings 54 Encounters
6.67 Hours of Video Footage
30 Dolphins Re-Identified
3 New Dolphin IDs Added to our Catalog

The 2004 Bimini field season ended on 30 September! We, Kathy DeStefano & Kelly Melillo, are very happy with how the season went, despite all of the hurricanes! (*DCP is also VERY happy with the results from the Bimini 2004 field season.*) We arrived on 6 June and were out on the boat as soon and as often as possible. Most trips were in the form of “dolphin weeks,” in which the same group of passengers was on the boat Sunday through Thursday. Our passengers were always eager to see the dolphins and remained respectful of each other, the boat crew and the dolphins throughout our swims. The passengers were also very interested in our weekly research presentations, and were always ready with great questions and comments!

By the end of the season, we completed 40 trips, which resulted in 81 sightings, 54 encounters (defined as 3 minutes of more underwater with dolphins in view) and ~7 hours of underwater video. Of this video, dolphins were in view more than half of the total recorded time. Also, we were able to re-identify 30 individual spotted dolphins, compared to 2003’s 27 individuals. We have also added 3 new IDs to the catalog, all of these new dolphins are young animals.

DCP’s inaugural “rotating field internship program” also went very well. Darcie Blanding (MS candidate at the University of Rhode Island) and Justin Gregg (Doctoral candidate at Trinity College Dublin in Ireland) were our first two interns to participate in DCP’s field program. Both Darcie and Justin will continue to work with Kathleen and DCP for their respective degrees. We enjoyed working with Darcie and Justin! We also participated, remotely, with the “Dolphin Sense” program at the Immersion Institute at MAIFE. This involved a live phone link to guests at the

aquarium – that is, we called in each day at ~ 2 pm to chat live with guests watching the program. We answered questions and introduced the audience to our field work. We were very pleased to participate over the long distance. The third new addition to the 2004 Bimini field season was our visits to local schools. We were able to give guest “lectures” to students at both Holy Name Catholic School and Gateway School. We hope to add the public school to our “lecture circuit” next year.



We also hope that our visits to the schools can become a permanent part of DCP’s Bimini

program allowing us to more effectively merge research and education.

The field season slowed a bit during September, as it was an unusually busy hurricane season. The island was hit by both Frances and Jeanne, and threatened by Ivan, but thankfully sustained only minor damage. However, as hurricanes inevitably have a negative impact on tourism, many boat trips were cancelled during our final month. We did get in some last minute trips on 30 September and 3 October. We were thrilled to end the season on the water!

Special thanks to Bill and Nowdla Keefe, the Bimini Undersea staff, all of our dolphin trip passengers, and everyone on Bimini for their hospitality. Our 2004 field reports can be viewed on the home page of the DCP web site.

*DCP Field Research Assistants
Kelly Melillo & Katherine DeStefano*

The Dolphin Gazette is also available on-line at www.dolphincommunicationproject.org/newsletter.

DCP Sponsorship Levels

The following list defines the benefits for each level of sponsorship of DCP:

- \$15 Student:** welcome packet **\$25 Individual:** welcome packet **\$35 Foreign:** welcome packet
\$45 Family: 3 note cards, 3 postcards & welcome packet (note: family sponsors consist of 2 or more individuals living in the same household.)
\$75 Supporting: A copy of *Dolphins* video (while supplies last or a DCP season summary or *Dolphin Spirit* video), 3 note cards, 3 postcards & welcome packet
\$250 Contributing: 1 DCP t-shirt, copy of *Dolphins* video (while supplies last, then a DCP season summary or *Dolphin Spirit*), 3 note cards, 3 postcards, & welcome packet
\$500 Patron: Limited edition matted print suitable for framing, 1 DCP t-shirt, a copy of *Dolphins* video (while supplies last, then a DCP season summary or *Dolphin Spirit*), 3 note cards, 3 postcards & welcome packet
\$1,000 Benefactor: 20% discount for individual sponsors on a DCP Ecotour trip, limited edition matted print suitable for framing, 1 DCP t-shirt, a copy of *Dolphins* video (while supplies last, then a DCP season summary or *Dolphin Spirit*), 3 note cards, 3 postcards & welcome packet

Welcome Packet: 1 packet of 5 bookmarks, welcome letter, DCP flyer, one-year subscription to the *Dolphin Gazette*, and a 10% discount on DCP-related merchandise.

Adopt-A-Dolphin & Name-A-Dolphin Programs

Our Adopt-A-Dolphin and Name-A-Dolphin programs offer an opportunity for interested persons to help sponsor and fund our field research studying the spotted dolphins around Bimini Islands, The Bahamas. Our adoption program includes nine different Atlantic spotted dolphins: Cleopatra, Freckles, Juliette, Nemo, Picky, SplitJaw, Swoosh, Teardrops, and White Blotch. Romeo was just named in July and will be joining our roster for adoption in October. You can read more about each dolphin on DCP's web site under the Bimini research or on the support page. Each one-year adoption costs \$30 while a name purchase is \$200 with the name being added to our permanent research database. Adoption packets include a certificate, photo of your dolphin, a spotted dolphin fact sheet, biographies of our named dolphins, a DCP flyer, and a copy of our most recent issue of *The Dolphin Gazette*, as well as the next 3 issues of our newsletter.

Become a spotted dolphin parent today & support valuable scientific research!

www.dolphincommunicationproject.org

Thank you to DCP Volunteers!!

Without your effort and assistance, DCP's office would not have run so smoothly while Kathleen was on Roatan gathering data on the bottlenose dolphins at the Roatan Institute for Marine Science (RIMS). You all did a great job processing data. Well done!

If you'd like to become a DCP volunteer, opportunities are always available for processing data and working with our video and sound files in our office. For more details, see the Education page on the DCP web site, or contact Tim Robbins, Volunteer Manager at MAIFE. Tim can be reached at: 860-572-5955 x209. All DCP volunteers coordinate their time through Tim as well as Kathleen.

DCP Roatan Ecotour Trips – Get ready for 2005 Fall!

We continue our studies of the dolphins at the RIMS, Anthony's Key Resort, Honduras. We have two weeklong trips available for persons interested in participating in our research: data collection and preliminary analyses. Of course, you'll also get to observe and interact with dolphins. The dates are: **10-17 September & 24 September – 1 October**. Deena Fabricant (dfabricant@mysticaquarium.org) and Bill Sperling (bsperling@idyllwild.com) are handling all the logistics and sign ups. You can also find more details on our web site at: www.dolphincommunicationproject.org/ecotours. We look forward to seeing you in Roatan!

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Yes! I want to sponsor the work of the Dolphin Communication Project.

Please enroll me at the level checked below.

New Sponsor

Student \$15

Individual \$25

Foreign Individual \$35
(outside USA)

Family \$45

Renewing Sponsor

Supporting \$75

Contributing \$250

Patron \$500

Benefactor \$1,000

Gift Sponsorship

**I would like to offer an additional
gift of: \$_____.**

Sponsorships to the Dolphin Communication Project are for one year.

My check made out to DCP/MAIFE is enclosed. *(Credit card payment is available online.)*

Name: _____ If a gift, note gift recipient at left & your contact

Address: _____ name, address here: _____

City: _____ State: _____ Zip: _____

Yes! I want to Adopt a Dolphin!

Freckles SplitJaw Swoosh Juliette Romeo Nemo Picky
Cleopatra Finn Lil Jess Prince William Teardrops White Blotch

Circle your choice, fill out the information above & send \$30.00 per adoption.

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55 Coogan Blvd.
Mystic, CT 06355

To:



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