

NEWSLETTER FOR THE DOLPHIN COMMUNICATION PROJECT

The Dolphin Communication Project (DCP) is focused on the dual goals of scientific research and education.

The summer field season is upon us!

As I am sure our loyal readers must know by now ... I LOVE summer. I love the hot, hazy, even humid, days of summer! And, with summer comes our newest field seasons! You'll read about the Bimini update, because yes, Kelly's already started trips to observe the dolphins there. Justin shares a summary of his seminar program, which I was sorry to have missed! Our new 2013 interns begin on June 5th and we welcome them with this issue. And, after receiving numerous haikus, we have selected our winners! I was impressed with the dolphin creativity each submission showed. Thank you!

Also in this issue, DCP shares with our supporters a new fundraising plan related to a planned RIMS research trip. You can also learn details about "whale Fall" in this issue. I am sure you'll have lots to enjoy!

Thank you for your continued support and Happy Reading! Cheers.

In this issue

Seminar Recap | Name ID#97 | RIMS Field Opportunity | Bimini Update | New Publications | Haiku Winners | Whale Fall | Join Us In Bimini! | Bimini 2013 Gear

Kathleen

Mailing Address

Dolphin Communication Project P.O. Box 711 Old Mystic, CT 06372-0711 USA

Thank you to DCP Volunteers & Interns!!

DCP would like to thank Nicole Danaher-Garcia, Catie Tobin and Pam Lovejoy for all their help this spring. Without your assistance, DCP's data analysis could not run so smoothly. You do a great job processing data and helping to keep things organized. Well done!

Internships

If you are interested in interning with DCP during a fall, spring or summer semester, more information is available on our website. Please note, most internships are office-based and do NOT include field work. Check out the web site before contacting us at info@ dcpmail.org.

Why can't apes and dolphins talk?



Seminar recap Submitted by Justin Gregg, PhD

On April 13, 2013, the first Apes and Dolphins seminar was held at the Free University in Amsterdam. Ape language expert Esteban Rivas from the Institute for Animals in Philosophy and Science joined DCP researcher Justin Gregg for a day-long seminar addressing the question of why it's so difficult to establish two-way communication with apes and dolphins. We covered subjects involving the study of the natural communication systems of apes and dolphins to determine how language-like they might be, as well as the many decades of researching involving teaching apes and dolphins to use artificial language systems and/or human language. We had an enthusiastic group of participants and some great discussions. The presentations were recorded on video, and we hope to make these recordings available to the general public sometime in the future.

The next seminar in the series will take place in September (tentatively scheduled for September 21st) and will focus on the study of intelligence in apes and dolphins. The third and final seminar in the series will focus on the ethical issues surrounding the study of ape and language intelligence. For more information on upcoming seminars, please check out our website www.apesanddolphins.com or friend us on Facebook: facebook.com/ApesAndDolphinsSeminarSeries



The Apes and Dolphins Seminar Series is a Minding Animals Partner Event



Name-A-Dolphin

DCP is proud to announce the latest opportunity for you to name a wild Atlantic spotted dolphin!



DCP ID#097 is a juvenile female. She was first seen off the island of Bimini, The Bahamas in 2009, but was not added to DCP's photo-ID catalog until 2011. Because she was already independent from her mother, we do not know whose calf she is. Although she has one faint scar, overall ID#097 is a "clean" young dolphin with no major scars on her body. So, researchers rely on her spot pattern to identify her. Under her left pectoral fin, she has two spots - like a human having two freckles in her armpit! In 2012, ID#097 was seen with fellow juvenile females Tilly (#87) and Noodle (#94) as well

as younger dolphins who are too young to be cataloged. Who will she hang out with next year?

Now that you know a bit more about #097, what name do you think suits her best? The cost to give a name to #097 - a rare and unique opportunity - is \$750. If you've got a name in mind, you can purchase your name-a-dolphin kit today! To name #097, please visit:

http://tinyurl.com/name097

After you make your purchase (using PayPal via the DCP website) we will contact you for more information about the name you've chosen.

What you will receive in your Name-A-Dolphin kit

personal welcome letter a certificate of naming a photo of your named dolphin suitable for framing a biography of your named dolphin unique footage of the dolphin you have named (a track on the adopt-a-dolphin DVD) a dolphin DVD with footage of the Bimini dolphin group a personalized adoption t-shirt showcasing an image of your named dolphin information about DCP and our research around Bimini *Dolphins: The Lighter Side* DVD A copy of the book *Dolphin Mysteries*, signed by Dr. Kathleen Dudzinski Dolphin Communication Project note cards and/or postcards (packet of 10) 10% discount on DCP eco-tour (valid for 2 years) an electronic subscription to the Dolphin Gazette, DCP's quarterly newsletter

RIMS and Fund-A-Geek - a perfect match?

DCP tries crowd-funding to help cover costs for research at RIMS in 2013 Submitted by Kathleen Dudzinski

Because the economy has been tough recently, DCP has not been able to fill our regular eco-tours to RIMS that supply funding for our data collection. We had to cancel our RIMS field research for 2012; thus forcing us to miss more than a year of valuable information in the lives of the dolphins we study at RIMS. And, while everyone's pockets have been lean, so to have the grant availabilities. That is, there are precious few grant opportunities for straight behavior field research.

So, DCP is going to try our hand at crowd-funding! In early June, we will have a project set up on Fund-A-Geek (www.fundageek.com) with a title something like "Understanding Dolphin Friendships". As you may remember from the last issue of the Gazette, we have been examining the quality of dolphin relationships with our focus on the dolphins at RIMS and around Bimini. I have some preliminary results and I'd like to see if some predictions I have about the dolphins at RIMS hold true. Thus, we'll try to raise some funds to cover the costs for getting me down to RIMS, and back. We also need to update our educational video detailing our research at RIMS, which will be another product of this trip.



Kathleen preparing to begin a session.

Our Fund-A-Geek Dolphin Research fundraiser will be launched soon – stay tuned! We'll send an announcement so you can spread the word about our research and fundraising project to all of your friends! Any and all support will be greatly appreciated. And, any funds above our goal will be put toward future research trips.



Kathleen observing 5 RIMS dolphins. Or maybe it's the other way round ...

RIMS or Bust ..

As mentioned above, DCP was unable to get to Roatan in 2012. But, we have a trip planned for late October. Kathleen will spend a week at the end of October studying the dolphins who call the Roatan Institute for Marine Sciences home. This week will not be an eco-tour in the normal sense. But, if you are interested in visiting Anthony's Key Resort during the same dates, then please send DCP an email (to the info@dcpmail.org address), and we'll give you the dates and the contact information so that you can make your arrangements.



Aerial view of Anthony's and Bailey's Keys, Roatan



Fiona Jumping!

Update from the Field: Bimini

Students and Strandings in The Bahamas Submitted by Kelly Melillo Sweeting

It was a quiet spring in Bimini as wrap up from 2012 continued and preparations for 2013 were in full swing. The research season really kicked off with our annual field course with the University of New Brunswick Saint John. We were thrilled to welcome back Professor Stephen Turnbull and although this year's class was smaller than years past, the students were eager and full of energy. The course included lectures, debates, photo-ID practicals, a Skype connection with DCP's own Justin Gregg, snorkel excursions and, of course, dolphins! The students were able to observe, first hand, both species of dolphins found around Bimini: Atlantic spotted (*Stenella frontalis*) and bottlenose



Atlantic spotted dolphin calf; photo by Professor Turnbull!

dolphins (*Tursiops truncatus*); they also observed young and old representatives of each species. We hope the students enjoyed their time in Bimini as much as Kel enjoyed having them. Now it is time to prep for the arrival of Sacred Heart University and later, our summer interns. Stay up to date with the happenings in Bimini by following our field reports, posted to www.dolphincommunicationproject.org, as well as Facebook and Twitter.



Beaked whale, stranded alive (photo: CJCrooks)

Between our prep and teaching, a "large dolphin or small whale" was reported by a local bonefish guide on the morning of 23 April 2013. Thankfully, a fantastic team of volunteers was available and raced into action. I was included in this team and for the first time, had to put my training provided by the Bahamas Marine Mammal Stranding Network in 2008 & 2009 to good use. The whale turned out to be a beaked whale (*Mesolodon* sp., likely *Mesoplodon europaeus* or Gervais' beaked whale). Although the whale was alive when it was first reported, and showed no signs of

obvious injury or illness, it died shortly into our efforts to get it to deeper water. This was not the result any of us had hoped for, but we knew we needed to shift gears and see what could be done to allow beaked whale researchers to learn from this animal's death.

Stranding report continued on page 6...

DCP's Spring Haiku Contest!

And the winners are....

From far away, look! It's square dancing dolphins Giddy-up, yee haw! Submitted by: Ally C. (age 7)

Dolphins ride the waves. Only see them for a minute. Keep you wondering. Submitted by: Abigail M.

Soaring through the sky, dolphins jump gigantic waves flipping acrobats Submitted by: Brynne M. (age 11)

Congratulations to our winners who each receive a 5-pack of DCP Dolphin Trading Cards (available for purchase online). Thank you to everyone who submitted a haiku to our contest - we enjoyed all the submissions, written by adults and children alike! It was a blast to read all of your creativity! If you would like to suggust a future contest, let us know at info@dcpmail.org.

Students and Strandings in The Bahamas, cont'd from page 5

So, the carcass was towed to a nearby beach and after some wonderful and much needed guidance over the phone from experts, the all-volunteer team began a cursory necropsy. The animal's overall length was 422 cm and tissue samples were taken from the lung, liver, heart, kidney, skin, blubber and brain. Stomach contents were also collected, although the stomach was virtually empty except for a plastic bottle cap. All samples were transferred to the Bahamas Marine Mammal Research Organisation (BMMRO), and we look forward to hearing the results of their tests – including sex confirmation as the whale had characteristics of both male and female beaked whales!



Erupted tooth, typical of male Gervais' beaked whales (photo: DCP)

You can read the entirety of my report at http://www.bahamaswhales.org/news/2013/news_Apr13.html. There you'll see our thanks to Dr. Diane Claridge, Dr. Ruth Ewing, Charlotte Dunn, "SharkLab" staff and volunteers, local volunteers (Tommy, Katie, Grant, Al, Jillian, Duncan), and The Bahamas Department of Marine Resources for their support.

~Kel

What Good Is a Dead Whale?

Researchers ask, "What is the importance of 'whale fall'?"

No one likes to think about dead whales. But, they are a reality of life in the ocean. And although it might be easiest to think of a dead whale simply as a loss of something, some researchers have set out to find out exactly what the whale carcasses, or 'whale fall,' contribute to the marine ecosystem.

Imagine this: you want to study something, but there are only six in the world - and they happen to be at the bottom of the ocean. This is the challenge facing researchers studying whale fall as only six natural whale carcasses have been found on the seafloor worldwide. Because of this, most of what has been learned about the role of whale carcasses in the ecosystem has been through sinking bones and carcasses themselves, and then exploring the remains over time using remotely operated vehicles (ROVs) and underwater cameras. Recently, a minke whale carcass was found at the bottom of the ocean in Antarctica, marking the first time whale fall has been studied in this region. *Learn more: National Oceanography Centre. "Antarctica's first whale skeleton found with nine new deep-sea species." ScienceDaily, 18 Mar. 2013. Web. 25 May 2013.*

When a whale carcass falls to the seafloor, it provides a burst of nutrients that can be utilized by animals throughout the food chain, from sharks to worms. Researchers say this nutrient load is the equivelant of what would naturally sink from the surface to the seafloor in 2000 years. Not too shabby whale carcass, not too shabby. *Learn More: University of Gothenburg. "New Species Discovered On Whale Skeletons."* <u>ScienceDaily, 21 Sep. 2009. Web. 25 May 2013</u>

Also, check out the "video abstract" of a study on white sharks feeding on whale carcasses: <u>http://vimeo.</u> <u>com/63683277</u> (Fallows C, Gallagher AJ, Hammerschlag N. (2013). White sharks (*Carcharodon carcharias*) scavenging on whales and its potential role in further shaping the ecology of an apex predator. PLOS ONE.)

Abstract for the 3rd International Conference on the Effects of Noise on Aquatic Life Documenting and assessing dolphin vocalizations and ambient and anthropogenic noise levels via PAM and an SPL meter KM Dudzinski, K Melillo-Sweeting, JD Gregg

The Song Meter SM2M Marine is an autonomous passive acoustic recorder that allows collection of audio data including ambient, anthropogenic, and animal sounds. We deployed SM2M recorders at three sites; documenting dolphin sounds off Bimini, Bahamas, and ambient and anthropogenic noise levels at Dolphin Encounters (DE), Bahamas, and in Guam. The SM2M was deployed for continuous recording (44.1 kHz sample rate, 12 dB gain, 3 Hz filter) to collect vocal data from Atlantic spotted (*Stenella frontalis*) and bottlenose (*Tursiops truncatus*) dolphins around Bimini. When recordings were divided into 2-hour segments per 24-hour period, no segment was without vocalizations. At DE, one SM2M was deployed (continuous recording, 44.1 kHz sample rate, 0 dB gain, 2 Hz filter) to investigate ambient and anthropogenic noise levels: average received levels (RL) ranged from 110 - 125 dB re: μ Pa @ 1m; the highest source level calculated was 147.98 dB re: μ Pa @ 1m. Baseline ambient RL (continuous, 32 kHz sample rate, 0 dB gain, 2 Hz filter) were documented for 72 hour periods at four sites near Guam, overall average ambient RL was below 118 dB re: 1μ Pa @ 1 m. Each location varied slightly in range and average received level with the area adjacent to a boat ramp presenting loudest ambient noise levels. SM2M noise level data were compared with values documented with a custom-built SPL meter. The methods and results presented here confirm the SM2M is a useful tool for assessing animal sounds and ambient and anthropogenic noise levels.

Come to Bimini...or just get the t-shirt!

Join us in Bimini, 30 June - 5 July 2013

Rare spaces are available on a prime "dolphin week" with Bimini Adventures. This opportunity includes:

5 nights' accommodation**

3 meals/day, prepared by private chef, plus drinking water and boat snacks 5 boat trips to see & swim with Bimini's wild dolphins (weather dependent) Snorkeling opportunities, DCP donation & More!

Starting at \$1845 (Due at sign-up)

We do not have long to accept new applicants, so email us (info@dcpmail.org) today for more information!

**The first boat trip is on 30 June; if you cannot arrive in the morning that day, we recommend arriving on 29 June. Additional



dolphin

hotel cost applies. Visit http://tinyurl.com/DCPecotourBimini



Each year, we offer gear through Cafe Press to commemorate our annual field work at our Bimini, The Bahamas field site. By making a purchase, you support our field work financially, but also by starting conversations when you sport your cool t-shirt, or drink from your Bimini



To purchase, visit:

2013 mug!

www.cafepress.com/Bimini2013



And remember, you can also get great generalDCP Gear at www.cafepress.com/dcpgear

So, if you are looking for a fun t-shirt or sweatshirt, cute baby gear or even a doggie hoodie, make those gifts for yourself or a loved one count even more. A portion of all orders goes directly to the Dolphin Communication Project.

Already weighed down by stuff? Considering giving a donation or membership to DCP as a gift for someone! To donate, please visit www.tinyrurl.com/DCPDonate

Adopt a Wild Dolphin

www.adoptawilddolphin.com

What's in your Adoption Kit?



An official adoption certificate

Photograph of your adopted dolphin

Details on how to download dolphin vocalizations from the Bimini adopt-adolphins as a ringtone or audio file

DVD containing video of the Bimini dolphins

Biography of your adopted dolphin

Welcome letter and registration info

Information Booklet with Atlantic spotted dolphin fact sheet and info about the Dolphin Communication Project

Dolphin trading card sample

Holiday gift ideas www.cafepress.com/holidaydolphin



Dolphins currently up for adoption



Where does money raised from DCP's adopt-a-wild-dolphin program go?



Adopting a wild dolphin with DCP helps to fund:

The purchase of new research equipment (e.g., cameras, underwater microphones)

Conservation and education programs on Bimini, in the US and around the world

Publication and dissemination of DCP's research results to the scientific community and the general public

Maintenance of the DCP website, field reports, and our podcast The Dolphin Pod

Classroom education programs for school-aged children including DCP Youth Program, Dolphin Research Trainee, Classroom Connections

Volunteer, ecotour and internship opportunities for the public

Name ID#97 and we'll add her to this list! Check page 3 and our website for details.

Adopt-a-wild-dolphin t-shirts tinyurl.com/ylfx44v



Pre-order Justin's new book

DCP Research Associate Justin Gregg will be publishing a popular science book on dolphin intelligence with Oxford University Press this year. The book will be released in September, but is now available for pre-order on Amazon. To order your copy, visit

www.aredolphinsreallysmart.com

OVERVIEW

How intelligent are dolphins? Is their communication system really as complex as human language? And are they as friendly and peaceful as they are made out to be? The Western world has had an enduring love affair with dolphins since the early 1960s, with fanciful claims of their 'healing powers' and 'super intelligence'. Myths and pseudoscience abound on the subject. Justin Gregg weighs up the claims made about dolphin intelligence and separates scientific fact from fiction. He puts our knowledge about dolphin behaviour and intelligence into perspective, with comparisons to scientific studies of other animals, especially the crow family and great apes. He gives fascinating accounts of the challenges of testing what an animal with flippers and no facial expressions might be thinking. Presenting the results of the latest research in animal behaviour, Gregg challenges many of the widespread beliefs about dolphins, while also inspiring the reader with the remarkable abilities common to many of the less glamorized animals around us – such as chickens.



DCP Announcements!

Robin L. Vaughn-Hirshorn, Elisa Muzi, Jessica L. Richardson, Gabriella J. Fox, Lauren N. Hansen, Alyce M. Salley, Kathleen M. Dudzinski, Bernd Würsig. 2013. Dolphin underwater bait-balling behaviors in relation to group and prey ball sizes. Behavioural Processes. *in press*. http://dx.doi.org/10.1016/j. beproc.2013.04.003

Contact DCP early this fall for the abstract or full text of this exciting paper on dusky dolphin foraging behavior

Lovejoy, P. (2013) Examining Social Quality between Dolphin Dyads. Independent Study Paper. Connecticut College: New London, CT

Also, DCP has been accepted for a poster presentation at the Third International Conference on the Effects of Noise on Aquatic Life to be held from August 11-16, 2013, in Budapest, Hungary. (*see page 7 for our abstract*).



DCP's Adopt-a-Dolphin Program

DCP currently has ~20 dolphins from our catalog of Atlantic spotted dolphins residing around Bimini, The Bahamas available for adoption. While adoptive parents do not get to take their dolphins home, they will receive a certificate of adoption, a photo of their adopted dolphin, some facts about Atlantic spotted dolphins, information about DCP and our research around Bimini and a dolphin video. They will also receive the most recent edition of the Dolphin Gazette, DCP's quarterly newsletter, announced quarterly by eblast. Be sure to send us your email address, or subscribe online at the newsletter page!.

All dolphin adoptions through DCP help support our dolphin research throughout the world, and the creation and implementation of local, national, and international education programs for students of all ages.

Each adoption costs \$30 and lasts for one year. Become a spotted dolphin parent today & support valuable scientific research!.

sale of these products will directly fund DCP's research and education

efforts. DCP is a nonprofit organization.

Yes! I want to	Some of our dolphins are listed below. For a complete list & all dolphin biographies, check out www.adoptawilddolphin.com
adopt a dolphin	Juliette Niecey Tilly Swoosh Milo Lone Star Trudy Tina Lumpy Lil' Jess

Please SENI	my adoption pack	kage to:	If this is a gift, please note gift GIVER address: Name: Address:		
Name: Address:] 			
	State:			State:	
			of		
Postcards \$1.00 each/3 for \$2	Iruka Gear To purchase Iruka gear visit www.cafepress/irukagear To purchase DCP gear, visit www.cafepress/dcpgear	Bookmarks \$0.25 each/ 5 for \$1.0	 \$100 Bimini : 0 al welcome letter \$100 DE : DE a welcome letter \$100 RIMS : D Personal welcon \$1,000 Researce Booklet, Person \$500 Education Personal welcon researcher OR a \$200 Dolphin I letter, Involvem \$150 Conserva come letter, Per 	Membership Calendar, 6 Dolphin Trading Can ters from Kathleen Dudzinski an adopt-a-dolphin kit, Dolphin calend DVD about RIMS dolphins, Dolphin me letter ch : Adopt-A-Wild-Dolphin kit, Ca aal welcome letter, Update followin m : Dolphin Activity Guide and DV me letter, Signed copy of Dolphin a free Classroom Connections prog Pod : Calendar, Water bottle, DCP nent in the podcast episode attion : Calendar, Water bottle, DCP sonalized update following Bimin communication programs	d from Kelly Melillo Sweeting dar, DCP Info Booklet, Personal n calendar, DCP Info Booklet, lendar, Water bottle, DCP Info ng dolphin survey /D, Calendar, DCP Info Booklet, Mysteries. A visit from a DCP ram Info Booklet, Personal welcome P Info Booklet, Personal wel- beach clean-ups
	(re-dolohin	PROJECT			seen here are also available nproject.org All profits from the

11

Coloring Page



This coloring page was created by longtime DCP supporter Ranke Gregg. Together with DCP Research Associate Justin Gregg, she has launched a series of funny parody coloring books for adults. Check them out at www.outsidethelinespress.com



Л COLORING DOOK



A Coloring Book