

NEWSLETTER FOR THE DOLPHIN COMMUNICATION PROJECT

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

A New Holiday Season & RIMS Season Recap!

Another year has sped by us! I guess that means we love what we do! It's hard to believe another holiday season is upon us. In light of the devastating Hurricanes this past summer season, we are keeping our holiday support options to a minimum, and providing donation options to you, our reader. We hope you were not impacted severely by any storms this past summer/fall season. We also got a bit nostalgic this autumn, and several of DCP's core team and long-time supporters share a few memories of their experience(s) with DCP. See page 2 for details. I also provide an update about our wildly successful RIMS field season in October (page 6) and let you know about our already-scheduled 2018 dates (page 8). Nicole informs us about her MS degree topic and we introduce recently named Vee, a female spotted dolphin now on our adoption roster! Grab a seat and have a good read! Happy Holidays! Cheers!

In this issue

Holiday Specials | Student Work: Nicole's Masters | Meet Vee! | DCP at SMM | Bimini Hurricane Relief | Kids & Animals | Announcements | Dolphin Coloring Page

Kathleen

Mailing Address

Dolphin Communication Project P.O. Box 7485 Port St. Lucie, FL 34985 USA

FL Solicitation of Contributions Reg. #: CH42894 (also see page 8)

Thank You volunteers & students!

DCP would like to give a special thank you to volunteers & students, Kaiya & Nicole, for their assistance this fall. Well done and thank you! Our data processing this fall could not have happened without you!

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 {at} dcpmail {dot} org.

Holiday Specials! The giving time of year

Become a DCP Member!

Membership Bonus Gift #1!

Give the gift of DCP membership - and receive "Fancy Goat!"

Your generosity is the lifeblood of our organization, and we could not operate without it. You can become a member of the Dolphin Communication Project by making a one-time

donation or becoming a Sustaining Member via a monthly contribution. It is a great way to honor someone else this holiday season!

The first 12 memberships* received will receive a copy of "Fancy Goat" by Jeremy Holmes and DCP's own, Justin Gregg. Outside the Lines Press has donated these books to DCP - thank you! In this fantastic children's book, a young girl laments her pet's "need" for an extravagant lifestyle. From wearing cravats, top hats, and pearls to doing ballet, flying planes, and having his own masseuse, the hapless run-of-the-mill goat embarks on lavish adventures in the finest of wardrobes.

*Offer applies to one-time memberships at the individual level and above, and sustaining memberships at all levels. While supplies last.



Membership Bonus Gift #2!

Marine Life Notecards for ALL Sustaining Memberships!

When DCP can count on small donations, every month, throughout the year, we can work with confidence that we'll stay afloat. Become a Sustaining Member today and receive a bonus back of marine life notecards!



Adopt-A-Wild-

Adopt-A-Wild-Dolphin Bonus! Free PDF book with all adoptions!

Choose from over 20 different Atlantic spotted dolphins. Receive a personalized adoption certificate, photos, videos and more. \$30 (e-kit) or \$35 (hard copy) All adoption orders received between now and 31 December 2017, will receive a special "Reflections from DCP" PDF book (electronic only) filled with shared memories from the DCP team and long-time supporters. www.adoptawilddolphin.com



Support us when you shop this holiday season

Buy your gifts and holiday essentials at smile.amazon.com. You shop. Amazon donates.



Make Dolphin Communication Project your charity of choice at AmazonSmile!

The 2017 hurricane season has placed financial and emotional burdens on many people. DCP has donated to hurricane relief on Bimini, our long-time field site in The Bahamas. See page 5 for details on how you can help Bimini too.

Life as a DCP Master's Student

Submitted by Nicole Danaher-Garcia

It has been a whirlwind of a year since I officially transitioned into my new role as a DCP Master's student! During the 2016-17 academic year, I narrowed down my project ideas and worked with my advisor at UMass Dartmouth, Dr. Richard Connor, as well as my committee members (including Kathleen) to come up with something amazing. I successfully defended my thesis proposal in April 2017; my project is titled "Relating Social Associations and Tactile Interactions of Atlantic spotted dolphins (*Stenella frontalis*) off Bimini, the Bahamas." Through this project, I hope to understand how the amount of time that individuals spend in the same group

Relating Social Associations and Tactile Interactions of Atlantic spotted dolphins (*Stenella frontalis*) off Bimini, the Bahamas

NICOLE DANAHER-GARCIA ADVISOR: RICHARD CONNOR DEPARTMENT OF BIOLOGY/MARINE BIOLOGY UNIVERSITY OF MASSACHUSETTS DARTMOUTH



relates to the relationships they have. I am in the process of developing coefficients of association (CoAs) that describe the proportion of time two individual dolphins are seen together in the same group. CoAs are a traditional approach to understanding a species' or population's social structure, as well as individual association preferences (i.e., who hangs out with whom). However, CoAs only tell us how often we are seeing two dolphins together versus when we see one without the other; they don't tell us much about the actual relationships between dolphins. To try to answer this second part, I will be looking at DCP's archive of underwater video to understand how these same individuals are actually behaving towards each other when in the same group. Using concepts developed by Kathleen and a few others, I can qualify interactions based on a set of exchanged behaviors—affiliative ("friendly"), agonistic ("aggressive"), or no exchange. As an example, I know that Romeo (#10) and Cerra (#38) are seen in the same group quite often across years but we might find that they actually never interact with each other once we look under the surface. I hope to have my data analyzed and the statistics finished by the end of winter break—hopefully, my next update will give us some interesting answers to these questions!

On top of the work I have been doing for my Master's thesis, I have also been travelling quite a bit! I was on Bimini with Kel for about 6 weeks this summer, assisting with the Sacred Heart University (SHU) field course, our new Volunteer Field Experience program, as well as three stupendous summer interns! If you didn't follow along this summer, catch up on old blog posts or grab the last issue of the Gazette for stories from these programs. Students are instrumental in our data collection and processing – this year, they especially made dents in all the photos and videos of both bottlenose and spotted dolphins.



During the last week of October, I travelled to Halifax, Nova Scotia (Canada), to take part in the 22nd Biennial Conference on the Biology of Marine Mammalogy (hosted by the Society for Marine Mammalogy). This was my first conference and it was incredible to see the enormous international marine mammal community. Each day, I was inundated with new ideas and pioneering research methods and I hastily wrote as many notes as possible during each presentation and poster session. I have so many ideas for new avenues of research at our Bimini and RIMS field sites—there's always so much potential! I was so excited and inspired that I almost forgot I have to finish my current project before jumping right into a new one....I was also privileged enough to present another poster (check out page 7) for DCP. This poster, "Behavioral Laterality in

Foraging Bottlenose Dolphins," was enthusiastically received by the scientists who stopped by and many people left their contact information for future exchanges of research ideas!

cont'd on page 7...

Meet Vee! She has her name, and she's ready for adoption!



Vee is a sub-adult, female Atlantic spotted dolphin. DCP has been observing her off the coast of Bimini, The Bahamas since 2012, when she was already a juvenile. She is a "clean" dolphin, meaning that she does not have any major nicks or scars. Because of this, researchers rely on her spot pattern to recognize her, year after year. Thankfully, she seems fairly interested in the boat and our cameras, which allows us to document her new spot development and associations over time. Through the years, she has been seen with younger dolphins, like Sulfur (#102), as well as older females, including Romeo (#10) and Juliette (#12). Who will she be with next year? And, when will she have her first calf? DCP will be watching the waters off Bimini to find out!

Vee was named in 2017 by Versature, a Canadian business phone services company.

Visit www.adoptawilddolphin.com to adopt Vee today!

Bimini, The Bahamas: Sacred Heart University 2018

Field Dates: 18 May - 24 May 2018 Plus, online portion before and after.

Spend 6 nights at our Bimini, Bahamas field site with Dr. Deirdre Yeater and Bimini Research Manager, Kel Melillo Sweeting. Hotel accommodations, all meals, course instruction and boat trips in search of wild dolphins (plus sharks!) are included. Participants are accepted on a rolling basis, so apply now. <u>Applications are due 15 December 2017</u>.

More info and to apply: http://studyabroad.sacredheart.edu/program/?pid=23462&p=summer-dolphin-communication-project

All students must take the course for credit with SHU; however, current students and recent grads from any university are welcome to apply.

Apply Today!



Beyond DCP

Hurricane relief, kindness, and a free ebook

This has been a very devastating hurricane season and our thoughts go out to all those impacted by storms. Of course, since DCP utilizes Bimini, The Bahamas, as a long-time field site and Kel calls the island home, they were in the forefront of our minds. Bimini fared extremely well in Hurricane Irma, given the dangerous forecast at one point and the devastation elsewhere, and was not impacted by Hurricane Maria. It is very possible that your hurricane relief budget has already been used and, if so, we are sure it was put to good use. If it hasn't, we have two recommendations for supporting efforts in Bimini. Though the island as a whole was spared, there was a tornado that severely damaged one neighborhood in particular and other, isolated damage is still in need of repair.

1) Wesley Methodist Church

This church is on Bimini and is giving donations directly to Bimini residents after folks demonstrate that they are actively making hurricane related repairs/replacements. Checks, made out to Wesley Methodist Church, can be mailed to:

c/o 330 SW 19th Ave, Fort Lauderdale, FL 33312

The funds are being handled by a local resident who we know personally and trust to choose wisely with respect to who receives funds and to follow through in getting it done.

2) Bahamas Red Cross https://www.bahamasredcross.com/

The Bahamas Red Cross has online instructions for "special donations," which are: "To donate to a specific cause, please fill out this donation form. Please email the donation form to bahamasredcross.net.bs for futher instructions. Thank you!" The form is very basic, but includes options to choose Disaster Relief, if you are happy to support The

Bahamas in general, or you can write something like, "For hurricane relief efforts on Bimini" in the "other" section.

Thank you for thinking of Bimini, and for following and supporting DCP. We have humbly made a donation to the Wesley Methodist Church hurricane relief fund.

Practice Kindness

Feel like there is a lot going on in the world? Have a lot going on in your life? We're not in the motivational speaker business, but sometimes we all need a little break. As we hit the final stretch of 2017, as we race through another holiday season...consider that if we could all practice *just a little more kindness* each day. Go ahead. Give it a try. Practice Kindness.



Free PDF Book: Kids & Animals

"The drawings in this collection are the result of two art projects titled, "I Have a Dream" and "I Am Thankful For"— two of the many activities undertaken by members of Jane Goodall's Roots & Shoots program, the Jane Goodall Institute's global environmental and humanitarian youth initiative. We hope that these beautiful drawings will inspire people all over the world to work to make our planet a more peaceful and compassionate place for all."

You can download your copy today:

https://www.colorado.edu/cedar/sites/default/files/attached-files/kids_and_animals_printable_lowresolution.pdf



Marina damage in Alice Town



Beach erosion in Porgy Bay

Update from the Field: RIMS 2017

Submitted by Dr. Kathleen Dudzinski, PhD

October 2017, brought DCP's largest eco-tour group to-date! We had 18 people join me and John to Roatan, specifically to Anthony's Key Resort to study the dolphins at the Roatan Institute for Marine Sciences! Some of these

folks were "old" friends (Bill & Ron!), some were new (Sonia, Frank, Bruce & Debbie!), others were "repeat offenders" (Corinne & Erin!), and a couple were research colleagues (Heather & Dee!). We had a splendid week of weather - both above and below the waves! There was relatively little rain, much sunshine and good underwater visibility. I was able to collect about nine (9!) hours of MVA2 video (with stereo audio) footage and an additional equal amount of video on the GoPro mounted to the top of the MVA2. Though I used a new camera in the MVA2 (thank you John for the loan!), the GoPro still offers a wider field of view leading to more confirmed



Anthony's Key from Roatan - with full rainbow! A welcome site!



Most of the October 2017 DCP eco-tour group!

dolphin identifications! (I'm still working out the kinks for

processing video data with two video screens running concurrently!) The adult males were in separate sections for much of my video observations as there were three older calves (Dory, Shawn & Stan) and a new younger calf (Bailey's male calf) in the main area. As such, our video observations allowed for more time recording mom/calf interactions and alloparenting by the young female dolphins ... the juveniles and subadults in the group. What this also means is I was able to get quite a bit of footage of Mrs. Beasley, Carmella, Alita and Gracie with each other and with their calves. We also spent time observing the older males, and so everyone (dolphin's, that is) was represented in our video records.

In addition to our regular data collection on the

behavioral interactions among individuals in this study group, Heather and Dee and I coordinated Denry, Kenly, Zach and Elyork to identify the best angles and locations to plan our future research project to study innovative (creative) responses in dolphins. We were lucky to get a bit of time with Teri near the end of our week to confirm protocol plans for collecting data in January on dolphin creativity. That is, we will record dolphins responding to Teri when she asks them to "do something new/ creative." We established where the surface video cameras should be and also how we could use two cameras in/at the water level to document



Alita & Dory - Alita has a leaf on her rostrum ... play time!



Polly and Calli waiting for me to enter!

dolphin responses. It was

exciting to be able to plan ahead for what we want to document for this research program.

All in all, our week on Roatan was a huge success! I look forward to returning to AKR/RIMS several times in 2018 for college-level field courses and for DCP's annual eco-tour for continuity in data collection/ observations. DCP's 2018 eco-tour week is set: 29 September - 6 October 2018. Spaces are offered on a first-come basis and a \$200/ person deposit holds your space/room selection. Visit DCP's RIMS eco-tour page (on our web site) to get all the details!! Or check out page 8 in this issue of the Gazette! See you next year!!

~Kathleen

DCP at SMM

Biennial Conference on the Biology of Marine Mammals

The Society for Marine Mammalogy (SMM) hosted its 22nd Biennial Conference on the Biology of Marine Mammals in Halifax, Nova Scotia, Canada last month. Though DCP's in-person presence was limited this year, we did have poster and workshop presentations. A heartfelt thank you to all of our collaborators, as well all of those who visited the presentations and provided feedback.

Poster Presentations:

Maust-Mohl, M., Kaplan, D.J., Haber-Sage, S., Melillo-Sweeting, K. 2017. Site fidelity and abundance estimates of bottlenose dolphins off of Bimini, The Bahamas. 22nd Biennial Conference on the Biology of Marine Mammals in Halifax, Nova Scotia, Canada, 22-27 October 2017.



Kaplan, D.J., Goodrich, S.Y., Melillo-Sweeting, K., Danaher-Garcia, N., Reiss, D. 2017. Behavioral Laterality in Foraging Bottlenose Dolphins (*Tursiops truncatus*). 22nd Biennial Conference on the Biology of Marine Mammals in Halifax, Nova Scotia, Canada, 22-27 October 2017.

Workshop Presentation:

Dudzinski, K. 2017. Understanding tactile dyadic exchange in both wild and captive dolphins – how they are similar and what we can learn to elevate animal welfare in both settings. Workshop Presentation: Experimental Science in Wild and Captive Animals. Workshop at the 22nd Biennial Conference on the Biology of Marine Mammals in Halifax, Nova Scotia, Canada, 28 October 2017.

Life as a DCP Master's Student

Continued from page 3

Finally, I am thrilled to have been invited to speak at a nearby middle school in New Bedford, MA, in December of this year. Our Sister School is a tuition-free, independent school for girls from low income families. The Head of School heard about the research I have been doing with DCP and invited me to talk to her 68 girls ages 10-14 about dolphins, biology, and the research I do. I'm so excited!

As you can tell, it's been a busy, exciting, fun-filled year! I'm looking forward to reporting back in a few months with the findings of my thesis research, and as always I can't wait until my next season in the field with Kel and the Bimini dolphins!





Join Kathleen at RIMS: 2018

Where: Roatan, Honduras When: 29 September - 6 October 2018



We are now accepting sign-ups for our next field session at the Roatan Institute for Marine Sciences (Anthony's Key Resort) in Roatan, Honduras. Our 2017 trip was a great success (check out page 6). Even with plenty of data still to process, we're already looking forward to 2018! Every member of our group gets personal exposure to DCP's research as well as free time to explore Roatan, both on land and under water. Learn more about this great program (including the new accommodation options*) on DCP's Roatan Ecotour Page (under Get Involved). And, if you're not sure what the

week will be like, check out my entries from last month on DCP's blog page (under Latest Buzz) for a glimpse! Cheers,

Kathleen

*What's that? More options?

Eeny, meeny, miny, moe

DCP has a three-tiered approach in 2018! Your cost depends on your lodging choice! We have a limited number of each room type reserved and they are offered on a first-come, first-served basis. Sign up today!

Key Superior Room: \$1,230 per person - on Anthony's key with air conditioning and a small mini fridge!

Hill Superior Room: \$1,015 per person - on the hill above the resort with air conditioning and a small mini fridge!

Hill Standard Room: Sold Out

Deposit: A \$200 USD/person nonrefundable deposit holds your space on DCP's 2018 Eco-tour program. After receiving your deposit, 50% of the balance is due by 31 March 2018. Final balance payment is due by 30 June 2018.

Also: These costs are based on double occupancy and include lodging, three meals a day and more (see website - it's a loooooong list!). Contact DCP for more details about trip logistics. Bottled water, alcohol, and soda are available for a small fee.

Airfare and Honduran departure taxes are NOT included.

Submit your \$200/per person, nonrefundable deposit today!



DCP Announcements!

We've been busy with our collaborators!

In addition to our conference presentations, check out these DCP publications:

Davis GE, Baumgartner MF, Gurnee J, Bell J, Berchok C, Bort Thornton J, Brault S, Buchanan G, Charif RA, Cholewiak D, Clark CW, Corkeron P, Delarue, Dudzinski K, Hatch L, Hildebrand J, Hodge L, Klinck H, Kraus S, Martin B, Mellinger D, Moors-Murphy H, Nieukirk S, Nowacek D, Parks S, Read A, Rice AN, Risch D, Širović A, Soldevilla M, Stafford K, Stanistreet J, Summers E, Todd S, Warde A, Van Parijs SM (submitted) Long-term passive acoustic recordings track the changing distribution of North Atlantic right whales (*Eubalaena glacialis*) from 2004 to 2014. Scientific Reports, 7: 13460. DOI:10.1038/s41598-017-13359-3



Dudzinski, KM, Charrier, I, Maust-Mohl, M, McFadden, S, Miksis-Olds, J, Reidenberg, JS, Thomas, J (in press) Chapter11. Bioacoustical Studies on Aquatic and Marine Mammals. In (JA Thomas ed.) Vol. II Chapter 11 Bioacoustical Studies on Aquatic and Marine Mammals. Springer-Verlag.

Dudzinski, KM, Mateleska, ME (in press) Conservation and education through dolphin research and eco-tourism. In (AB Kaufman, MJ Bashaw, TL Maple eds). Scientific Foundations of Zoos and Aquariums: Their Role in Conservation and Research. Cambridge University Press, UK.

THE DOLPHIN COMMUNICATION PROJECT CHARITABLE SOLICITATION NUMBER CH42894, MEETS ALL REQUIREMENTS SPECIFIED BY THE FLORIDA SOLICITATION OF CONTRIBUTIONS ACT. A COPY OF THE OFFICIAL REGISTRATION AND FINANCIAL INFORMATION MAY BE OBTAINED FROM THE DIVISION OF CONSUMER SERVICES BY CALLING TOLL-FREE (800-435-7352) WITHIN THE STATE OF FLORIDA, OR 850-410-3800 WHEN CALLING OUTSIDE THE STATE. REGISTRATION DOES NOT IMPLY ENDORSEMENT, APPROVAL, OR RECOMMENDATION BY THE STATE.

In-Kind Donations: Our Wish List

Do you have access to any of this equipment? Contact DCP to make an in-kind donation today! (Yup, in-kind donations are tax-deductible, too. Contact your account to learn how.)

- * Compact HD Projector * Underwater still cameras * SD cards * GoPro * Handheld GPS *
- * Office supplies paper, pencils, erasers, rechargeable

batteries, toner *

- * Frequent flyer miles * Laptop *
- * Video camera * Hydrophones *



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 dolph vocalizations from the Bimini adopt- dolphins as a ringtone or audio file					
DVD containing video of the Bimi dolphins					
Biography of your adopted dolphin					
Welcome letter and registration info					
Information Booklet with Atlantic spott dolphin fact sheet and info about t Dolphin Communication Project					
Dolphin trading card sample					
Holiday gift ideas www.cafepress.com/holidaydolphir					
Tax -					
A Second					

Dolphins currently up for adoption





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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

Stay tuned in 2018 for the next Name-A-Dolphin opportunity!!

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



10

DCP's Adopt-a-Dolphin Program

DCP currently has ~25 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!.

Yes! I want to	Some of our dolphins are listed below. For a complete list & all dolphin biographies, check out www.adoptawilddolphin.com
	Juliette Niecey Paul Swoosh Milo Cerra Inka Tina Lumpy Lil' Jess Freckles
adopt a dolphin!	Split Jaw Noodle Seabeagle Sulfur Vee

I would like to adopt a dolphin: \$35 for one year. **Dolphin name:** Please cut out and mail your order form, with check, to DCP at P.O. Box 7485, Port St. Lucie, FL 34985. Credit card payment is available online through our web site at www.dolphincommunicationproject.org

Please **SEND** my adoption package to:

If this is a gift, please note gift **GIVER** address:

Name:Address:		Name: Address:				
City: Email:	State:	Zip:	City: Email:	State:	Zip:	-
			Å			
Postcards	Iruka Gear	•••••	M	embershin		





To purchase Iruka gear visit www.cafepress/irukagear





Notecards \$2.50 each/ 3 for \$6







DCP Gear To purhcase DCP gear, visit www.cafepress/dcpgear





Sustaining Memberships:

Donate from \$5 to \$100/month to receive a DCP memo pad and information booklet!

Annual Memberships :

Student: \$20 Individual: \$30 Family: \$45 Supporting: \$75 Contributing: \$150 Patron: \$500

Supporting, Contributing & Patron Members receive a DVD copy of Dolphins - The Lighter Side. Contributing & Patron Members also receive a photo album featuring images and information about all of our adopt-awild-dolphins. All gifts subject to availability and may change.

Visit www.dolphincommunicationproject.org to become a member today!

Support DCP's research efforts buy purchasing some of the many products that we offer for sale. All products seen here are also available on our website: www. dolphincommunicationproject.org All profits from the sale of these products will directly fund DCP's research and education efforts. DCP is a nonprofit organization.



The Coloring Spirit!

No matter what holidays you celebrate, we hope you enjoy this festive coloring page from Ranke de Vries.

