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NEWSLETTER FOR THE DOLPHIN COMMUNICATION PROJECT

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

Summer is Upon us! Data Collection is Ongoing!

It's Summertime! My favorite season of every year! Part of the reason is because it's also data collection season! Summer is time for boat trips and observations of spotted dolphins around Bimini. Kel is already going strong with boat trips and school groups. We have a DCP-Bimini Eco-Tour this July (see page 4). We also have one space left on the DCP-RIMS Eco-Tour (page 4)! Our summer internship program was resumed and we have five interns collaborating with DCP now and throughout the summer! And, for those of you interested in patterns ... well, I decided to give you a little more detail on how we identify patterns of behavior during data analyses in the non-datacollection months of the year (see page 3)! Maybe you can try your hand at identifying your own dolphin on our puzzle=color page! Happy Reading and Happy Summer! (Remember your sunblock!)



Summer Fun in the Sun!!

In this issue

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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 Tori Meyer & Garion Rivera, for their assistance this past spring. We also welcome DCP's Summer 2017 Interns and soon the VFEPs! See page 5 for more info. Well done and thank you! Our data analysis this spring 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.

Summer Research Season - 2017!

Bimini, The Bahamas - Dolphins, Students, Kel & DCP

May is the official start to DCP's summer field season!



Every year, the start of the field season sneaks up on me. Guess what? It happened again this year! I can't believe May is already wrapping up. In mid-May, I visited some local classrooms before welcoming Dr. Daisy Kaplan (DCP Research Associate) back to Bimini, with her May field course from St. Mary's College of Maryland. During these early season dolphin trips, we saw Tina (#14) with her calf, Prince William (#64), Swoosh (#36), Stefran (#82) and un-named #101 (pictured here). Hopefully, we'll ID even more dolphins once we review still photographs and video data. Also this May, I've visited guests at WildQuest and students aboard the S/V *Juliet*. Nicole (DCP Master's student) has just returned to Bimini. Together, we'll lead Dr. Deirdre Yeater and students from Sacred Heart University for their field course. In mid-June, our first ever Volunteer Field Experience (VFE) participants will arrive, followed by our summer interns. Read more about these student opportunities on page 5. From 2 – 7 July, we are also leading a tourist Research Experience (aka Eco-Tour). Believe it or not, there

are still a few spaces available – check out page 4. And of course, keep tabs on all of our Bimini adventures (including support from Bimini Adventures – ha!) by following our blog, posted regularly to our website and Facebook pages. \sim Kel

Name-A-Dolphin

Bimini Atlantic spotted dolphin #102 needs a name!

DCP ID#102 is a juvenile, female Atlantic spotted dolphin. DCP has been observing her off the coast of Bimini, The Bahamas since 2013. She is recognizable even before we enter the water, as she has two distinct notches in the center of her dorsal fin. In 2013, she also suffered an injury to her peduncle. Though this injury healed very well, it has left a permanent scar. Neither of these markings slow her down though! She is a busy dolphin, seen in a variety of social groups. Like "Seabeagle" (ID#106), un-named #102 has also been observed with fellow juveniles, Inka (#93) and Paul (#99).



Now that you know a bit more about #102, what name do you think suits her best? The cost to give a name to #102 - a rare and unique opportunity - is \$750. If you've got a name in mind, you can purchase your name-a-dolphin kit today!

http://dolphincommunicationproject.org/index.php/shop/name-a-dolphin/name-102

Update from the Office: data analyses

Submitted by Kathleen Dudzinski, PhD



Dolphins checking out the MVA2!

Analyzing the data is where patterns become evident!

Collecting the data is fun! Observing dolphins interact with one another, recording their behavior on video, and documenting their behaviors is exciting. I also find analyzing the data to be just as exciting, enthralling even! It's true that for every hour of data collected, we have about 20-30 hours of analysis time. This includes acoustic processing as well as ID and behavioral examinations. But ... from the detailed, lengthy analyses, patterns of behavior and interaction begin to emerge! From our multiple hours of observation, we have learned that dolphins use their pectoral fin

as a tool for social bonding, especially between non-kin pairs. That is, dolphins use their pectoral fins to establish and maintain their relationships with unrelated individuals. But, I digress ... see, it would be easy for me to spend the next several pages sharing with you the details we've uncovered about how dolphins use their pectoral fin to mediate their relationships and interactions! Data analyses provide us a window into the lives and world of dolphins (or any animal species one might be studying!).

Data are collected every summer from Bimini, with periodic boat trips in the autumn, winter and early spring seasons. At Roatan, data are collected on week or two-week long excursions. During the non-data-collection weeks and months,

we examine and process the data. The first step is creating what we call a "video log" for every bit of video recorded. (Normally, I'd refer to videotapes, but in this digital age, we have video clips, not full tapes!) With the first clips of each season (or session), we also complete new sketches for each dolphin that depict the scars, marks and other ID pigments or details used for ID confirmation. The video log is the foundation for all future research questions. Once the video logs are complete, we can conduct event sampling for specific behaviors. And, DCP's research collaborators can refer to the video logs when they use different years of data for their research questions.

Each summer or semester, interns with DCP are taught how to process the video logs. They learn how to recognize and confirm ID on the dolphins swimming across the screen. Once their skill with the video logs is set, then interns help process these data for our different behavioral questions. And, in a few cases, we have interns with DCP who focus on the acoustic data and processing.



Patrick & Kaiya processing video data in the office.

Continued on page 6 ...

Next Chance to join Kathleen: 30 September - 7 October 2017

We will return to Roatan to collect data with eco-tour participants again in 2017! The program is scheduled for 30 September - 7 October, 2017. We have **ONE** space remaining!! Check with us if you are interested ... and check out the RIMS Eco-tour page (look under the Education tab) to learn more about cost (just \$900 pp!) and other details. With a great 2-for-1 special from the folks at Anthony's Key, you get a great deal *and* help DCP!

Sign up today if you are interested as the rooms are going fast!

www.dolphincommunicationproject.org

Field Opportunities

In addition to our fall RIMS Eco-Tour, a Bimini Eco-Tour & field courses ...



Bimini, The Bahamas: 2-7 July 2017

DCP is offering a prime season eco-tour to Bimini for interested folks.

The dates are 2-7 July 2017. A few spaces are still available.

\$1875 includes 5 nights' accommodation (dbl occ), 5 dolphin trips (weather dependent), meals, snacks and more!

A bucket list level experience to swim with wild dolphins!

Contact DCP at "info {at} dcpmail {dot} org" for more details or to sign up.

Time is running out!

We'll see you in Bimini!



January 2018: Roatan, Bay Islands, Honduras

Option A
Colorado State University
6 - 13 January 2018

Option B
University of Rhode Island
13 - 20 January 2018



For general course information, visit:

http://dolphincommunicationproject.org/index.php/get-involved/college-courses/rims-dolphin-behavior

Kathleen and DCP will return to Roatan next year for two weeklong field courses merging animal behavior and physiology topics! Kathleen will co-instruct the programs with Dr. Shane Kanatous (CSU) and Dr. Justin Richard (URI). Contact DCP for more information to join these field courses! Email us at "info {at} dcpmail {dot} org"



August 4 - 11, 2018: DCP & St. Mary's University

DCP will return to Roatan in August 2018 with Drs. Hill and Karlin for a weeklong field course merging animal behavior and conservation biology! Contact DCP for more information to join this field course! Email us at "info {at} dcpmail {dot} org"

For general course information, visit: http://dolphincommunicationproject.org/index.php/get-involved/college-courses/rimsdolphin-behavior







DCP's Internship Program

Summer Interns, Office Interns ... and the new VFE participants!

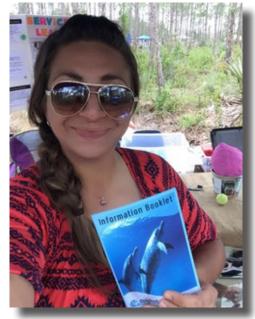
This year marks the restart of DCP's summer field internship program after a one year hiatus and we couldn't be more excited! Tori, Kaiya and Patrick have already begun working at the DCP office – in fact, Tori has been volunteering with DCP since October 2016! And, Kaiya and Patrick first met DCP during different Bimini university field courses. They'll continue working with Kathleen in the office until mid-June, when they travel to Bimini to help Kel with data collection and analyses until August.

DCP has also launched a new field program: the "Volunteer Field Experience." Our VFE participants, Garion and Mathew, will spend 12 nights assisting with data collection and analysis at our Bimini field site. And, like Tori, Garion volunteered during the recent spring semester at the DCP office. We are pleased to have these five dedicated students assisting with and learning from DCP!



Garion & Tori processing RIMS video logs for dolphin IDs at the DCP office.

Data analysis efforts by our summer interns and VFE participants include processing video data from both our RIMS



Tori at Oxbow for Earth Day 2017 representing DCP & IRSC!

and Bimini field sites for individual dolphin IDs and event-sampling the video data for tactile interactions (e.g., pectotal fin contacts and other physical contacts or object play). Once in Bimini, DCP's summer interns and VFEs will also help complete data entry, photo-ID from still photographs and video, interact with tourists, and write entries for our blog and social media sites. Of course, these students will also help

collect data as boat space and time permits! There is so much to do – here we go!

> Patrick & Kaiya hard at work logging a videotape from the RIMS 2016 dataset.





You might remember last year DCP started "Pay It Forward for Conservation" by donating to Viva Vaquita! The plight of this tiny cetacean is even more critical. Organizations in the USA and Mexico are collaborating to try to save the few remaining Vaquita. Even Hollywood is helping!

Leonardo DiCaprio wants to save endangered porpoise and the Mexican President is all ears!

Check out this link!

http://www.cnn.com/2017/05/12/americas/dicaprio-endangered-vaquita-trnd/index.html

Continuing with Data Analyses ...

continued from page 3

Confirming who is who from the video data relies on the individual spot patterns or the scars and marks that each dolphin possesses. They don't come with name tags or "bar codes"!

In some of the photos below, we share with you some of the different ID marks for the spotted dolphins around Bimini (Sf refers to their Latin or scientific name, *Stenella frontalis*). Follow along with the DCP blog throughout the summer to read about the dolphins Kel and the DCP interns observe and record!

And, if you are at all interested in what we do with these data once we've confirmed IDs and done some behavioral event sampling of the data, then please check out page 8 for a list of new publications from DCP. You can find some of these articles as PDFs from the DCP publications page on our web site!

Remember ... it's all in the patterns! Cheers!

Two adult female spottd dolphins sharing a pectoral fin "handshake."

~ Kathleen



Sf ID# 069 - Tim (male)



Sf ID# 010 - Romeo (female)



Sf ID# 014 - Tina (female)



Sf ID# 106 - Seabeagle's fluke (female)

Check out DCP info online!



DCP will offer several new field courses in 2018!

Check out the 12 minute video of our 2017 program at RIMS here: https://vimeo.com/205122802!

DCP offers both print and electronic adopt-a-dolphin kits!

Visit www.adoptawilddolphin.com to order today. Print kits are just \$35 and e-kits are \$30!



AMAZON SMILE https://smile.amazon.com/



How many of you shop on Amazon.com? We bet it's a lot. What if, instead of starting at amazon.com, you could simply start at smile.amazon.com and poof! - a percentage of your purchases would go to the Dolphin Communication Project as a direct donation. You'd say, "Sign me up!"

Well, it's easy. Use your existing Amazon account. Find all your wishlists, registries and shopping carts waiting for you. On your first visit to smile.amazon.com, simply select Dolphin Communication Project as your charitable organization. Amazon will remember this and from that point forward, as long as you start at smile.amazon.com, every eligible purchase you make will result in a donation to DCP.

Thanks to Amazon for this great program - and thanks to you for selecting DCP! Happy Shopping!

Your DCP Membership is Waiting!

Memberships go a long way to help DCP continue our research and education efforts and we are pleased to offer two ways to become a member: via a one-time donation or automatic monthly payments!

Sustaining memberships:

Choose your increment: \$5, \$7.50, \$10, \$15, \$20 or even \$100/month. Sign up once and your credit card or PayPal account will automatically be charged each month. No fuss. No muss.

One-time memberships:

With membership levels available for all budgets, this membership options allows you to make your entire annual contribution in one go.

DCP Announcements!

We've been busy with our collaborators!

Check out these DCP publications:

Harvey, B, Dudzinski, KM, Kuczaj, S (2016). Associations and the role of affiliative, agonistic, and socio-sexual behaviors among common bottlenose dolphins (*Tursiops truncatus*). *Behavioural Processes*. 135: 145-156.

Harder, JH, Hill, HM, Dudzinski, KM, Sanabria, KT, Guarino, S, Kuczaj II, SA (2016). The Development of Echolocation in Bottlenose Dolphins (*Tursiops truncatus*). *International Journal of Comparative Psychology* (special issue). 29: 1-19.

Dudzinski, KM, Ribic, CA (2017). Pectoral fin contact as a mechanism for social bonding among dolphins. *Animal Behavior & Cognition*. 4(1): 31-49.

Kaplan, JD, Melillo-Sweeting, K, Reiss, D (2017). Biphonal calls in Atlantic spotted dolphins (*Stenella frontalis*): Bitonal and burst-pulse whistles. *Bioacoustics*. DOI: 10.1080/09524622.2017.1300105.

in other news ...

True to his word, Captain Nate Riley has just donated proceeds from pre-orders of his awesome book, *Bahamas Bucket List for Divers*, Bimini Edition, to DCP! We know all his readers are going to love the book - including us!

Thank you so much to Captain Nate and everyone who purchased this great dive guide!



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 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

























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

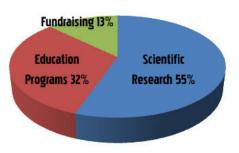
Maintenance of the DCP website, field reports, and our podcast The Dolphin Pod

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

Volunteer. ecotour and internship opportunities for the public

> See page 2 for details on how YOU can name ID#102!

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



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





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 |

| Split Jaw | Noodle

•	Dolphin name:
Please SEND my adoption package to:	If this is a gift, please note gift GIVER address
Name:Address:	Name:Address:
City: State: Zip: Email:	City: State: Zip: Email:

Postcards

\$1.00 each/ 3 for \$2







Notecards

\$2.50 each/ 3 for \$6







Iruka Gear

To purchase Iruka gear visit www.cafepress/irukagear



DCP Gear

To purhcase DCP gear, visit www.cafepress/dcpgear







Membership

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-a-wild-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.



Puzzler Page = Color Page!

Rather than quiz your knowledge of a dolphin species name or trivia related to our field sites for this issue of the Gazette, we are looking for your "inner Picasso!" Below is an example of our dolphin ID sketch sheet. Here's your chance to draw a dolphin with specific ID markings! Happy Summer!

