


 ▶ KATHLEEN'S FIELD UPDATE....2


 ▶ KEL'S FIELD UPDATE....3


 ▶ LATEST ABSTRACTS....4 & 5

# The Dolphin gazette

NEWSLETTER FOR THE DOLPHIN COMMUNICATION PROJECT

*The Dolphin Communication Project (DCP) is focused on the dual goals of scientific research and education. Our mission is to promote the scientific study of dolphins and inspire their conservation.*

## Jumping into Autumn!

Dear Reader/DCP supporter,

It always amazes me how fast the summer season zips by us. I hope everyone has had a relaxing but full few months since the last *Gazette*. In this issue, we update you on our field seasons (to the right, Marica's smile seems bigger than Bailey's!) and share news about our recent publications! We've been busy! As students return to school - virtual or in-person - DCP will resume our webinars. Thank you for your continued interest and support of our research and education programs!

Happy Reading!

Cheers!

~*Kathleen*



*Marica and Bailey meet at RIMS in June!*

## In this issue

Update from Roatan | News from Bimini | Recent Abstracts | Online Education | October RIMS Program | Patron Adoption & Sponsor A Classroom | Spotlight on Romeo | Species Account Assignment

### Mailing Address

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

FL Solicitation of Contributions  
 Reg. #: CH42894 (also see page 10)

### Thank You volunteers & students!

Thank you to to Manon for her continued dedication. Thanks also to Taylor & Emil, our remote volunteers, Amilynn, our Social Media Intern, and Brice & Mary, our master's students. Your contributions to our research and education programs are very valuable!

### Internships

If you are interested in interning with DCP in the field next summer, apply for an SFE or full summer internship. Please note, most other internships are office-based and do NOT include field work. Check out the web site before contacting us at [info@dcpmail.org](mailto:info@dcpmail.org).

# Update from the Field: DCP at RIMS/AKR in June

*Submitted by Kathleen Dudzinski, PhD (DCP Director)*

DCP returned to Roatan rather quickly after our May eco-tour! Kathleen returned to Anthony's Key Resort (AKR) and the Roatan Institute for Marine Sciences (RIMS) in mid-June with two student groups. We were the first student groups to visit RIMS and AKR in about a year and a half (i.e., due to the pandemic). And, AKR was nearly up to full capacity by the end of June, even though it was hard to tell the resort was full.

Kathleen was joined by Manon as part of the DCP team and we welcomed Shane and 10 students from CSU for our first week and Annalisa and her Master Course in Large Marine Vertebrates students from the University of Bologna for the second week.

Each week came with a packed itinerary! And, since the sun was bright and shiny by 5 AM each day, we were

in the water taxi by 6 AM and over to Bailey's Key by 6:15 AM or so for early AM data collection! The dolphins did their best to entice the students into games of seagrass play. I'm pleased to share that both groups of students did well to avoid most of these invitations until after data were collected! We collected at least one session of underwater video data with the MVA each morning and then spent time daily also collecting space use data and observing the dolphins from above the water surface. These groups were the first to use the revised "space-use grid" to collect data on how the dolphins use the main lagoon. You might remember that the new grid divides the main lagoon into 9 blocks of space. Not only was it helpful for the space use data collection but it also helped students when they collected observations during my morning sessions. So, a win-win! (Of course, now, we're entering all the data collected for analyses!)

continued on page 9 ...



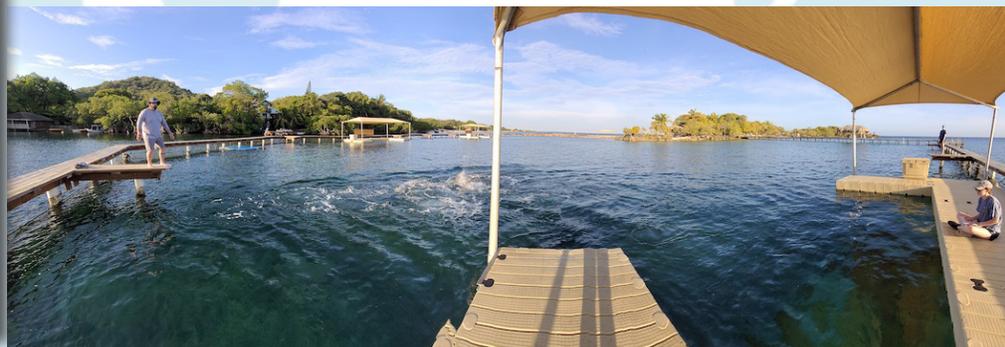
*The CSU group meeting Calli in June 2021!*



*The U. of B. Group - before AM data collection!*



*Students collecting space use data from the palapa at the north side of the main lagoon.*



*A panorama view of the main lagoon during space use data collection ... showing dolphins visible at the surface.*

# Update from Bimini

Submitted by Kel Melillo-Sweeting (Bimini Research Manager)

Everyone has weathered unique circumstances recently. DCP lost the majority of our 2020 Bimini field season due to COVID-19. This year, we found ourselves vaccinated and ready to collect data, but due to changes in the permitting process here in The Bahamas, a permit was not issued in time to make use of our main summer season. We are optimistic that a permit will be issued in 2022 and are hopeful that the new system provides The Bahamas much needed protection of and benefits from their own natural resources.

We thank the ongoing commitment of DCP supporters and the Bimini community, including our local collaborator, Sea Crest Hotel & Marina, who will see us through this challenging time.

While we prepare for 2022, we hope you enjoy these throwback Bimini photos! Thank you to everyone who has joined us over the years. If you are interested in joining us in 2022, let us know. We hope to have dates reserved soon.

~Kel



2008 Experience



2017 Beach Cleanup



2017 Close Up!



August 2018



May 2018



August 2019



July 2019 Beach Cleanup

# Presentations & Publications

Check out these recent abstracts!

More Details on Page 10

## Examining shark bite scars on dolphins off Bimini, The Bahamas: Comparisons between bottlenose and Atlantic spotted dolphins

Published in: *Marine Mammal Science*

Authors: K. Melillo-Sweeting, M. Maust-Mohl, M. Smukall



Shark predation risk impacts many facets of dolphin life, including habitat use and foraging strategies. Because direct predation is rarely observed, researchers instead examine dolphins in situ for past injuries that can be attributed to sharks. We analyzed existing photo-ID catalogs of common bottlenose (*Tursiops truncatus*) and Atlantic spotted dolphins (*Stenella frontalis*) off Bimini, The Bahamas. A minimum of 29% of individual *T. truncatus* had evidence of a past, nonlethal shark bite, while for *S. frontalis* this was only 15%. For both species, shark induced injuries were predominantly on the dorsal side. Regression analyses indicated that *T. truncatus* were more likely to have shark bite scars than *S. frontalis* and the likelihood of documenting a shark bite scar increased with a higher percentage of the body photographed. *T. truncatus* were less likely to have scars in the dorsal region, but sampling differences could have influenced these results. While the shark species responsible for scars was not determined, *T. truncatus* and *S. frontalis* overlap spatially and temporally with tiger (*Galeocerdo cuvier*) and bull sharks (*Carcharhinus leucas*) off Bimini. This study builds on the understanding of dolphin/shark interactions from longitudinal studies of dolphins in this region, providing insight into factors influencing predation risk.

## The merger of two dolphin societies: violating terrestrial mammal 'norms'



Presented by Nicole Danaher-Garcia at Annual Conference of the Animal Behavior Society

Authors: N. Danaher-Garcia, R. Connor, G. Fay, K. Melillo-Sweeting, K.M. Dudzinski

Terrestrial mammal societies often have clear social boundaries and hostile or neutral interactions with other groups. Immigrants are typically single or small groups of maturing males. Since 2003 off Bimini, The Bahamas, we have studied a population of ~120 Atlantic spotted dolphins that exhibit a fission-fusion grouping pattern, with preferential same-sex and age affiliative contact behavior and associations, which are strongest among adult males. Beginning in 2013, 45 individuals moved into the area from 160 kilometers away. This group assimilated peacefully into the resident group within one year; strong resident/immigrant associations developed, especially between subadult/adult males, and patterns of association among resident dolphins were consistent. Resident/immigrant affiliative contact exchanges were not uncommon and no aggression was observed. The integration of two social groups has not been previously reported in any delphinid and is rare in terrestrial mammals. We attribute this phenomenon to low costs of locomotion and large indefensible ranges of delphinids compared to terrestrial mammals, and possibly a difference in temperament during interactions with strangers.

Scroll to page 5 for another abstract!

# Online Dolphin Education

Something for everyone!

**DCP webinars:** 14 months, 52 programs & counting!

**Stay Tuned for Fall 2021 Schedule**

(Dolphin Lessons have a password; contact DCP if you have not already received it.)



A huge thank you to everyone who joins live and those who catch the recordings. We paused our live programs for the summer, but look forward to returning in the fall. Stay tuned!

[Webinars on DCP Website](#)

[Webinars on DCP's YouTube Channel](#) (subscribe now!)

**The Dolphin Pod** is appropriate for all dolphin lovers and our recent relaunch adds a comedic angle. [Click here to have a listen](#) directly on DCP's website, or find *The Dolphin Pod* wherever you get your podcasts.

**Kids Science Activities** are accessible on our website - [just click here](#). From interactive activities for elementary school students to word searches, jumbles, and coloring sheets, there is something for everyone.

Check Page 7 in this issue of the *Gazette* for details on [Sponsoring A Classroom](#).

## Abstracts, cont'd from page 4

### **Bottlenose Dolphin Calf Initiated Pectoral Fin Contact Exchanges with Mother, Other Kin, and Non-Kin**

*Published in: Animal Behavior & Cognition*

*Authors: K.M. Dudzinski, C.A. Ribic, H.M. Hill, T. Bolton*

For dolphins, the strongest bond documented is typically that between a mother and her pre-weaned offspring, but outside of the maternal relationship, our knowledge of calf behavior is limited. We examined how 23 bottlenose dolphin (*Tursiops truncatus*) calves (11 females and 12 males from 9 matriline) initiated pectoral fin contact (PFC) exchanges with their mothers and kin ( $n = 362$ ) versus with non-kin ( $n = 950$ ). Calves initiated PFC exchanges with preferred partners (primarily their mothers) over individuals who were simply available to them. For calves with mothers as their only kin available, there was a difference in how they shared PFC with non-kin adults versus non-kin young. A calf was twice as likely to initiate PFC with an adult (mother or adult non-kin) as with another young dolphin. Male and female calves were different in how they initiated PFC with kin and non-kin, which supports previous research that identified a sex difference in calf behavior. These results support the observation that kin and non-kin dolphins share PFC differently. It is also likely that kin (mothers and calves, siblings, etc.) use other forms of contact to share information and potentially develop their relationships. Understanding all types of tactile contact would facilitate a more detailed understanding of how touch might be used by dolphins when relationships are established and maintained.

# RIMS Program Updates

DCP's dolphin studies on Roatan in 2021 & 2022!

## DCP's Research Continues through Eco-tours to Roatan!

Join Kathleen on Roatan at Antony's Key Resort (AKR):

October 9 - 16, 2021

DCP returns to Roatan in October 2021, to collect data with eco-tour participants. This will be Kathleen's 4th visit to Roatan in 2021, and there's **only space for 2-3 more participants** on our October program.

As always, spaces are filled on a first-come, first-served basis, but we still have a spot for you!

Check out our [field blog](#) for more details about our experiences at AKR and RIMS.

You can also contact DCP by email for more information.

Check out the [RIMS Eco-tour page](#) (look under the Education tab) to learn more about logistics and other details. Or send DCP an inquiry by email ([info{at}dcpmail{dot}org](mailto:info@dcpmail.org)).

[www.dolphincommunicationproject.org](http://www.dolphincommunicationproject.org)

*Dates and other details for our 2022 programs to AKR/RIMS will be available in late 2021. Stay tuned to our website, blog, and Gazette!*



# More Options to Support DCP!

We are proud to offer a variety of ways to support our mission - and spread dolphin joy!

## Patron Adopt-A-Dolphin

DCP's Patron Adopt-A-Wild-Dolphin program allows you the opportunity to adopt one of four specific dolphins from our Bimini, The Bahamas, field site to have an even greater impact on DCP's mission. The extra money raised from these kits will be funneled directly into DCP's Bimini field site research and related education programs. As a thank you for purchasing a Patron kit, DCP streamlined the kit design to make the details more concise and access more direct to our adoption content, including several video/audio files as electronic links online (or available on USB drive for the print version of this Patron Adoption Kit). Choose from Tina, Prince William, Vee, and Paul - four long-time residents of the warm turquoise waters near Bimini!



Patron Adoption kits:  
Electronic version: \$135  
Hardcopy version: \$169

[Click here to be among the first Patrons](#)

## Sponsor A Classroom - *Dolphin Classroom Connection*

By Sponsoring a Dolphin Classroom Connection, you support DCP's research, education, and conservation efforts financially, AND you bring DCP directly into a classroom of your choosing!

Anyone can Sponsor a Dolphin Classroom Connection. Have a child? Sponsor their classroom! Homeschool your kids? Sponsor your own classroom! Have a niece, grandson, neighbor who is a student or a teacher or a student teacher? Sponsor their classroom!

Want to Sponsor a Dolphin Classroom Connection, but don't know any kids or teachers? That's okay! We'll find a classroom for you!

Dolphin Classroom Connection kits come in print versions (\$500) and electronic versions (\$300). Choose what works best for your chosen classroom. Both options include a 45-minute Internet connection with a DCP scientist!

[Click here to start your sponsorship.](#)

### Print Version

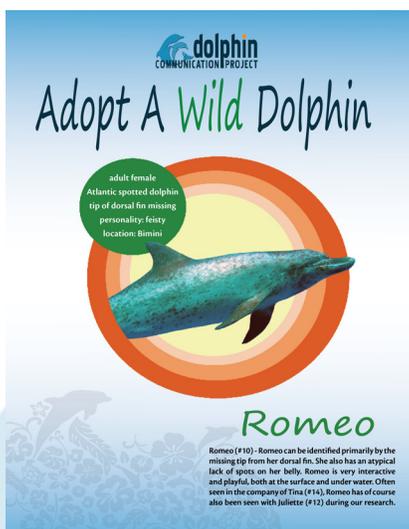
- \*Welcome Letter
- \*USB drive with Educational Materials
- \*Print Dolphin Adoption Kit
- \*30 DCP Info Booklets
- \*30 DCP Trading Cards
- \*45 min. Internet Connection with a DCP Scientist

### E-Version

- \*Welcome Letter with Links to:
  - \*Educational Materials
  - \*Electronic Dolphin Adoption Kit
  - \*PDF of DCP Info Booklet
  - \*PDF Photobook
- \*45 min. Internet Connection with a DCP Scientist



## Spotlight on: Romeo



Romeo is an adult dolphin who can be identified mainly by the missing tip from her dorsal fin. She is a prime example of the challenges of studying wild dolphins; she was first identified as a male! We were soon



shown our error, but Romeo was just so charming, her name had to stay. Romeo is very interactive and playful. Of course, Romeo has been seen with [Juliette](#) (#12) on occasion, but she is more frequently seen with [Swoosh](#) (#36) and [Tina](#) (#14).

Stay tuned for 2022 dates to join us in [Bimini](#) - and search for Romeo and all the Bimini Adopt-A-Wild-Dolphins!

[Click here to adopt Romeo!](#)



The spotted dolphins around Bimini are ready for adoption all year round! Great gifts for little ones, even teenagers and grown-ups love seeing the images and video of each dolphin. Plus, you can feel good about making a purchase that directly helps dolphin research, education, and conservation.

Hard Copy (Print) Editions: \$35 (free shipping in USA, \$20 international shipping)

Includes printed biography, personalized certificate, 5x7 photograph, 2 randomly selected dolphin trading cards, the DCP info booklet, plus links to dolphin videos featuring your adopted dolphin and its Bimini friends!

Electronic Editions: \$30 (same price everywhere)

Includes link to 3 PDFs: the DCP info booklet, a Photobook featuring the adopt-a-dolphins, plus Adoption Kit PDF with biography, photo, personalized adoption certificate, and links to dolphin videos featuring your adopted dolphin and its Bimini friends!

Visit [www.AdoptAWildDolphin.com](http://www.AdoptAWildDolphin.com) to select your dolphin and kit edition today.

# Update from the Field: DCP on Roatan in June!

*Submitted by Kathleen Dudzinski, PhD (DCP Director)*

...continued from page 2:

Of course, these two weeks were field courses, which means each day's schedule was very full! In addition to early morning data collection, we had both formal (in classroom) lectures and informal discussions on topics including biology, behavior, physiology, and more. We also observed more than dolphins on several day and night snorkel boat trips. We even kept an eye on a spotted eagle ray who made a habit of spending time near the water taxi stand on Anthony's Key!

We learned from each other and from the AKR staff. We delighted in being the first student groups to return to AKR and RIMS after a year spent mostly in virtual attendance to not only classes but, it seemed, to life more generally!

You can check out DCP's field blog to read about the day-to-day activities of these groups, and all of DCP's past ecotour and field course programs ([on the DCP website](#)).

Thank you as always to the AKR and RIMS families for welcoming us (and their other guests) back to the Resort that Nature Built!

Cheers

*~Kathleen*



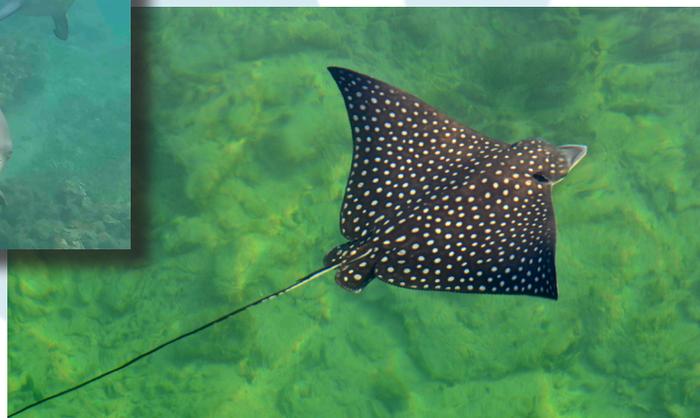
*Davide meeting Bailey during an encounter in late June, 2021!*



*Morning panorama of the main lagoon, after data collection with the MVA*



*Who's observing whom?*



*Spotted eagle ray ... actually in the back lagoon area, not near the water taxi stand. We saw several in June.*



*Shane's thumb with an octopus after the night snorkel ... just before returning to the sea!*

# DCP Announcements!

## Publication Updates

Melillo-Sweeting, K, Maust-Mohl, M, Smukall, MJ. (2021). Examining shark bite scars on dolphins off Bimini, The Bahamas: comparisons between bottlenose and Atlantic spotted dolphins. *Marine Mammal Science*, 1-11. DOI: 10.1111/mms.12840. The abstract is on page 4. Please contact us for the PDF.

Annual Conference of the Animal Behavior Society (Aug 2021): Nicole gave a great 10 minute presentation during the virtual conference, while also co-moderating her session. Well done Nicole! See her abstract for this presentation on page 4 of this issue.

Dudzinski, KM, Ribic, CA, Hill, HM, Bolton, T (2021) Dolphin Calf Initiated Pectoral Fin with Kin and Non-kin. *Animal Behavior & Cognition*, 8(3), 376-390. The abstract is on page 5 and the full PDF is on [DCP's website](#). Contact

Biennial Conference on the Biology of Marine Mammals (Dec 2021): Kel, Kathleen, Nicole, and Manon all had abstracts accepted for participation in this conference! Our abstracts will be in the November *Gazette*.

**Plus several manuscripts in revision, review, or prep for publication consideration, including:**

Hill, HM, Yeater, D, Highfill, L, Bolton, T, Henriquez, W, Dudzinski, K, Gutierrez, M, Birk, D. (in revision). Effects of Human-Dolphin Interactions on Tourist Knowledge, Attitudes, and Behaviors about Dolphins and Conservation. (to - *Society & Animals*)

Danaher-Garcia, N, Connor, R, Fay, G, Melillo-Sweeting, K, Dudzinski, KM. (in prep) Using social network analysis to compare the association and interaction networks of Atlantic spotted dolphins around Bimini, The Bahamas (to - *Behavioural Processes*)

Danaher-Garcia, N, Connor, R, Fay, G, Melillo-Sweeting, K, Dudzinski, KM. (in prep) Tactile exchanges between Atlantic spotted dolphins (*Stenella frontalis*) around Bimini, The Bahamas. (to - *Behavioral Ecology and Sociobiology*)

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 accountant to learn how.)**

\* Compact HD Projector (high vis) \* Underwater still cameras \* SD flash cards \* GoPro \* Handheld GPS \* Office supplies \* Frequent flyer miles \* Laptop \* Giftcards

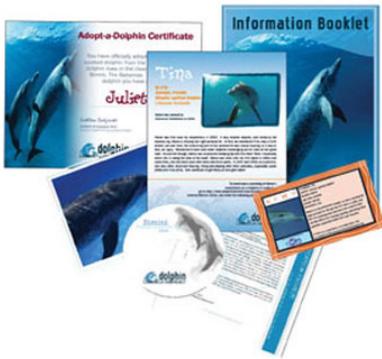


*DCP's Florida Solicitation of Contributions registration number is CH42894.*

# Adopt a Wild Dolphin

[www.adoptawilddolphin.com](http://www.adoptawilddolphin.com)

## What's in your Adoption Kit?



An official adoption certificate

Photograph or PDF photobook of your adopted dolphin

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

Link to video of the Bimini dolphins

Biography of your adopted dolphin

Welcome letter and registration info

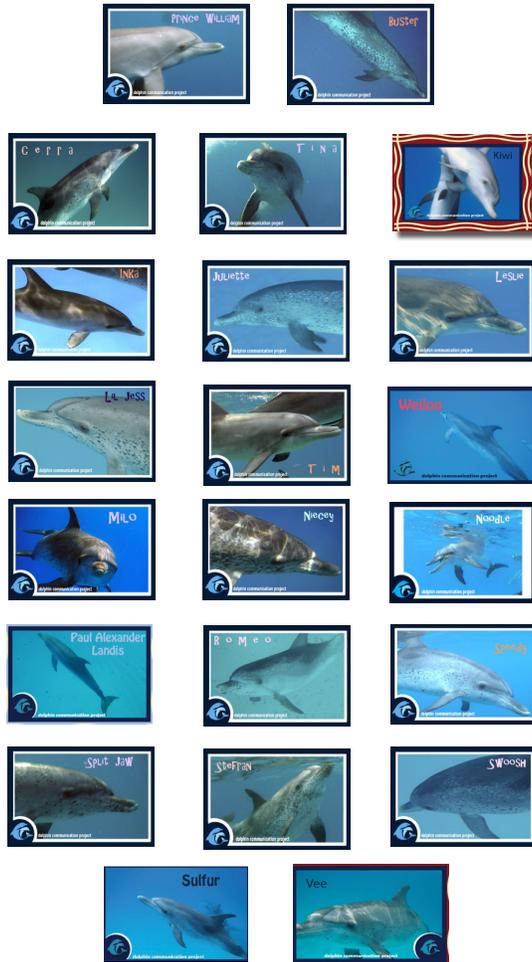
Information Booklet with Atlantic spotted dolphin fact sheet and info about the Dolphin Communication Project

Dolphin trading card sample (hard copy only)

Holiday gift ideas  
[www.cafepress.com/holidaydolphin](http://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

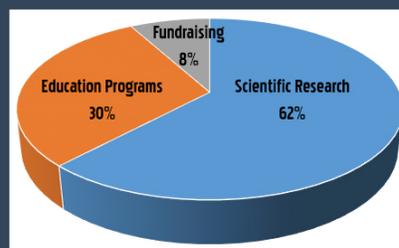
Publication and dissemination of DCP's research results to the scientific community and the general public

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

## Where does money raised from donations, dolphin adoptions and field courses go?



Adopt-a-wild-dolphin t-shirts  
[List of shops here](#)



# 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/\$35 and lasts for one year. Become a spotted dolphin parent today & support valuable scientific research!*

**Yes! I want to adopt a dolphin!** Some of our dolphins are listed below. For a complete list & all dolphin biographies, check out [www.adoptawilddolphin.com](http://www.adoptawilddolphin.com)  
 Juliette | Niecey | Paul | Swoosh | Milo | Cerra | Inka | Tina | Weiloo | Lil' Jess | Kiwi | Split Jaw | Tim | Prince William | 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](http://www.dolphincommunicationproject.org)

Please **SEND** my adoption package to: If this is a gift, please note gift **GIVER** address:

Name: \_\_\_\_\_ Name: \_\_\_\_\_  
 Address: \_\_\_\_\_ Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Email: \_\_\_\_\_ Email: \_\_\_\_\_



## Postcards

\$1.00 each/ 3 for \$2



## Iruka Gear

To purchase Iruka gear visit [www.cafepress/irukagear](http://www.cafepress/irukagear)



## Membership

### Sustaining Memberships:

Donate from \$5 to \$100/month to receive a special gift!

### 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](http://www.dolphincommunicationproject.org) to become a member today!

## Notecards

\$2.50 each/ 3 for \$6



## DCP Gear

To purchase DCP gear, visit [www.cafepress/dcpgear](http://www.cafepress/dcpgear)



*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](http://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.*



# Assignment: Species Account

Check out this activity - for a school assignment or just for fun - from our [Kids Science Activities](#).

## ACTIVITY 10: DOLPHIN SPECIES ACCOUNT

**Directions:** Chose any dolphin species and complete the information below.

**Common Name:** \_\_\_\_\_

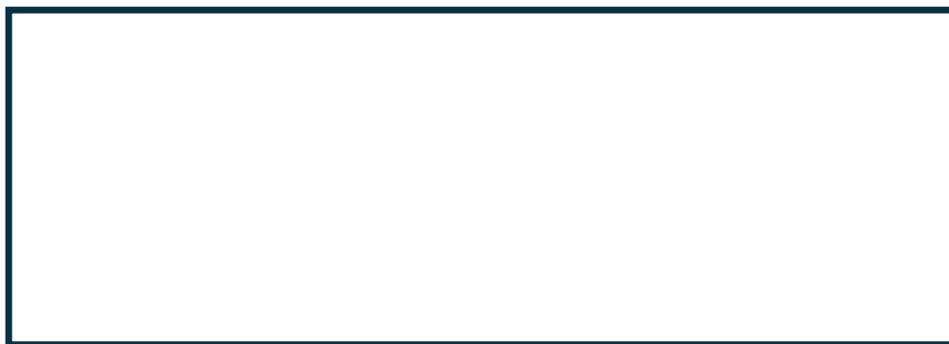
**Latin (scientific) Name:** \_\_\_\_\_

**Weight at Birth:** \_\_\_\_\_ **Length at Birth:** \_\_\_\_\_

**Maximum Weight:** \_\_\_\_\_ **Maximum Length:** \_\_\_\_\_

**Diet:** \_\_\_\_\_ **Life span:** \_\_\_\_\_

**Photo: (copy or draw)**



**Range: (color/shade areas where your species is naturally found)**



**Fast Facts: (include several facts about your species)**

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