



Bahamas Marine Mammal Research Organisation

Conservation of marine mammals and their habitats through scientific research and educational outreach

Spring 2013	
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BMMRO bids farewell to Education Officer

Volume 3
Issue 2

Kendria Ferguson, BMMRO's education officer, has moved back to Nassau. Kendria has been involved with BMMRO since 2008 when she volunteered as a marine biology university student. She was employed full-time at BMMRO to provide marine mammal education and outreach for two years, 2011 & 2012.

In the last two years, Kendria has visited 15 schools, 35 classrooms and has engaged over 2,000 students with activities and information about the biology of marine mammals commonly found in The Bahamas.



Through this educational outreach, BMMRO has raised awareness about the marine environment, inspired Bahamian students to study disciplines within the marine science field, and instilled in them an excitement about science.

During her time at BMMRO, although her main responsibility was as an Education Officer, Kendria became an effective part of the research team, providing help both at sea and in the office, as well as helping to run our annual whale camps for Bahamian children.



BMMRO would like to thank the following organisations for supporting our educational program: Friends of the Environment, The Cable Cares Foundation (Cable Bahamas), The Lyford Cay Foundation and Save the Manatee Club.

BMMRO would also like to thank Kendria for all her hard work and dedication. She remains a valued colleague of BMMRO's, and an avid supporter of marine conservation in the Bahamas. We wish you the very best in your future endeavours.



Students of Every Child Counts enjoy working on a dolphin poster.

Congratulations Diane!

Diane Claridge, BMMRO's Executive Director, successfully completed her final oral examination for her PhD qualification in March at the University of St Andrews in Scotland. Her exam lasted three hours and was followed by an evening of celebration.

Diane's PhD dissertation title is 'Population Ecology of Blainville's beaked whales', in which she presents results from 15 years of field work in Abaco.



TO LEARN MORE, PLEASE VISIT OUR WEBSITE: www.bahamaswhales.org

President's Update



Charlotte Dunn

We will miss you, Kendria! (Page 1) Kendria's ability to reach Bahamian children and enable them to get excited about our marine environment will be a hard act to follow. She wears her passion for the Bahamian marine environment on her sleeve and has the rare ability to engage both children and adults. We wish Kendria luck and the very best in

her future career as a biologist, educator and conservationist in the Bahamas.

The combination of more scientific publications about marine mammals in the Bahamas (below), the recent natural history conference held in Nassau (Page 3), and the release of a new educational video (Page 4), have all been fantastic mediums in spreading the word of how rich our marine environment is, and how much we still have to do.

If you would like to receive an e-copy of BMMRO's newsletter, please contact us at info@bahamaswhales.org to be added to the list.

BMMRO Welcomes Interns



Front (L-R): Nicole Lee with Sophia and Diane Claridge with Harry and Legacy Patterson. Back (L-R): Marie Guilpin, Sydni Coleman and Charlotte Dunn.

In February, BMMRO welcomed three enthusiastic young scientists to BMMRO's research team,

Nicole recently graduated with her masters degree from the Scripps Institution of Oceanography, and during her stay at BMMRO assisted with acoustic analysis.

Marie graduated in 2010 with a masters in Marine Mammal Sci-

ence from the University of St Andrews in Scotland, and updated our sperm whale catalogue, highlighting animals that were biopsied and tagged throughout The Bahamas.

Sydni has a background in biology and assisted with estimating the size of sperm whales from acoustic recordings.

BMMRO would like to thank each of them for their hard work!

New Beaked Whale Sounds Described In Publication

Beaked whales are known for their extremely long (up to an hour and a half), deep dives and relatively short surface times. During these short surface bouts, BMMRO scientists are working to gather photos, collect biopsy samples and deploy tags on these animals; all with the common goal of learning about their biology and habitat use in The Bahamas.

Since these animals spend a considerable amount of their lifetime at great depths where visibility is limited, the use of sound may be an important tool for maintaining social groups, as it is for finding prey.

To understand beaked whales vocalisations, scientists reviewed recordings made from acoustic recording tags, known as DTags, that were attached to five animals off of the Atlantic Undersea Testing and



Top: Scientist deploy a DTag on a Blainville's beaked whale, using a flexible pole. **Bottom:** A DTag pictured on an adult female.

Evaluation Center off of Andros Island in the Bahamas.

DTags are equipped with hydrophones, so sounds made by the tagged animals and any sounds made by their conspecifics are recorded along with their dive depths. Using over 80 hours of acoustic recordings obtained from these tags, scientists were able to identify four new sounds that have never been described for this species. Two of the sounds were only made by the adult male tagged and were made before foraging clicks started. Scientists believe these new vocalisations could be important for communication amongst social group members.

Congratulations to BMMRO's President, Charlotte Dunn and the supporting authors on their recent publication in Bioacoustics: The International Journal of Animal Sound and its Recording.

Dunn, C., Hickmott, L., Talbot, D., Boyd, I. and L. Rendell. 2013. Mid-frequency broadband sounds of Blainville's beaked whales. *Bioacoustics*. DOI:10.1080/09524622.2012.757540

Please see December's webstory for more information; http://bahamaswhales.org/news/2012/news_Dec12.html

BMMRO Scientists Present At Natural History Conference



The Bahamas National Trust in partnership with The College of The Bahamas (COB) hosted a week long conference in March, on the Natural History of The Bahamas. Topics presented by eminent scientists who have dedicated years to important research in the Bahamas ranged from butterflies to sawfish, and flamingos to iguanas, with workshops addressing conservation needs of bonefish and conch. Another focus of the meeting was building relationships between scientists and the academic staff of COB.

BMMRO presented on: "Investigating Manatee Habitat use in The Berry Islands" and "Beaked whales and navy sonar in The Bahamas".

Videos of presentations from the conference can be found at;

<http://www.bnt.bs/BNT-Video-Collection/BNT-Natural-History-Conference-Presentations>

Test your whale knowledge!

Which three species of beaked whales can be found in The Bahamas?

- A) Blainville's, Baird's and Hector's beaked whales
- B) Baird's, Blainville's and Cuvier's beaked whales
- C) Cuvier's, Blainville's and Gervais' beaked whales
- D) Gervais', Hector's and Baird's beaked whales



Turn to page 4 for the answer!

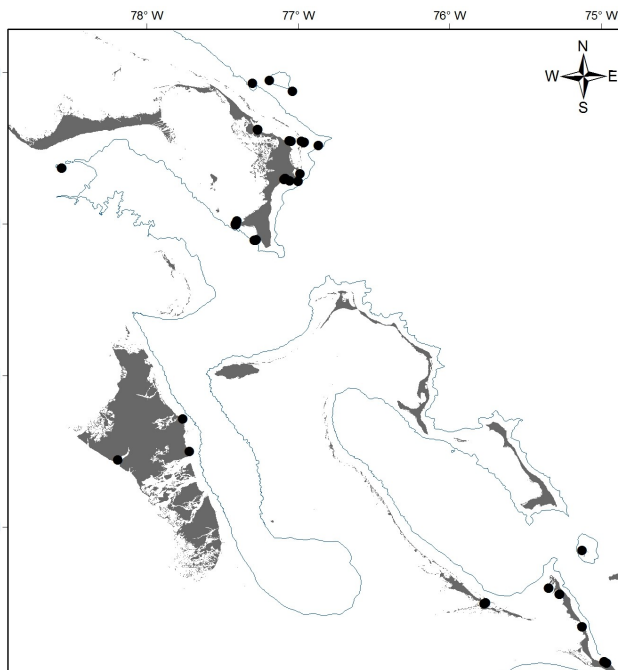
2013 Winter Cetacean Sightings in The Bahamas

There have been 57 sightings of 9 different species of whales and dolphins throughout the Bahamas from January-March 2013, including:

- West Indian manatee (*Trichechus manatus latirostris*)
- Bottlenose dolphin (*Tursiops truncatus*)
- Blainville's beaked whale (*Mesoplodon densirostris*)
- Risso's dolphin (*Grampus griseus*)
- Short-finned pilot whale (*Globicephala macrorhynchus*)
- Sperm whale (*Physeter macrocephalus*)
- Unknown delphinid
- Unknown medium cetacean
- Humpback whale (*Megaptera novaeangliae*)

Many of these records have been from sightings reported to BMMRO from the public. These data are vital to understanding the distribution and abundance of these species and is greatly appreciated.

THANK YOU !!!!



Three ways to report sightings:

1. Complete our sighting report form to www.bahamaswhales.org/sightings
2. Email the sighting information directly to us at info@bahamaswhales.org
3. Post on our Facebook page

Don't forget to send us your marine mammal sightings!

Educational dolphin video released

In March, BMMRO, in partnership with Loggerhead Productions, premiered its second marine mammal educational video entitled 'Dolphins of The Bahamas'. This video is part of a series of short educational films that are being funded by the Lyford Cay Foundation, highlighting marine mammals commonly found in The Bahamas and in this case, Atlantic Bottlenose Dolphins.

Dolphins of The Bahamas, takes you on a journey into a dolphins' world, underwater! Guided by narrator, Olivia Patterson, students are able to see how dolphins use sound to communicate with each other, locate food, and avoid predators like sharks. In the Bahamas, bottlenose dolphins have adapted to use a feeding technique called crater feeding, which is when a dolphin sticks its head in the sand and uses echolocation to find razor fish (see picture).



A dolphin crater-feeding



You can watch 'Dolphins of The Bahamas' and 'Manatees of The Bahamas,' on conchsaladtv.com, and stay tuned for more videos coming later this year.

Our Mission:

To promote conservation of marine mammals and their habitats through scientific research and educational outreach.

Our Vision:

- 1) To conduct scientific field studies in the Bahamas that increase understanding of species' biology and inform conservation management decisions.**
- 2) To disseminate results that raise awareness and appreciation of marine mammals in the Bahamas and ultimately influence policy makers.**



BMMRO's Board of Directors & Staff

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Test Your Whale Knowledge!

Of the 21 recognized species of beaked whales found worldwide, three are known from The Bahamas, Cuvier's beaked whales, Gervais' beaked whales and Blainville's beaked whales.

This is a picture of the head of adult male Blainville's beaked



Trivia Answer: C) Cuvier's, Blainville's and Gervais'

WE APPRECIATE YOUR HELP!



Thank you to all who have helped BMMRO by reporting sightings, volunteering your time, providing financial support, and donating resources. Without your valuable contributions, the scientific research AND educational opportunities created for young Bahamians, would not be possible.

Contact Us

Postal Address: P.O. Box AB-20714
 Marsh Harbour, Abaco
 The Bahamas

Physical Address: Sandy Point, Abaco
 (opposite Oeisha's Resort)

Office Phone: 1 (242) 366-4155 (8am-5pm EDT)
Cell Phone: 1 (242) 357-6666
Email: info@bahamamaswhales.org
Website: www.bahamaswhales.org

And don't forget to look us up on Facebook!

BMMRO is a registered Bahamian non-profit organisation and accepts US and Canadian tax-deductible contributions through its partnership with PERC, a US registered 501(c)3 organisation.