



The Dolphin Project

# On Effort

September 1, 2008

P.O.Box 60753  
Savannah, GA 31420

## TDP BOARD of DIRECTORS

**PEACH HUBBARD**

President, Edu Outreach, Publicity

**DEANNA TAYLOR**

Vice President, Data Entry

**MARGARET ANN BROWN**

Secretary, ATL Publicity

**CHARLOTTE KEENOY**

Volunteer Coordinator, Adopt Dolphin

**CHERYL TILTON**

Survey Kits, Merchandise

**HERB JOE**

Survey Logistics

**LORI MUSKAT**

Education Outreach

**FRAN LAPOLLA**

Principal Investigator, Website

## TDP VIP STAFF

**AL HATCHER**

Treasurer

**Dr. TARA COX**

Science Advisor

**KARLA JOHNSON**

ATA Training, Elections

**BARBARA CONWAY**

SAV Training

**JIM BUCHANAN**

Photo Coordinator

**SANDRA BATH**

Data Review Coordinator

**TED HENNING**

Survey Kits

**ROY HUBBARD**

Education Outreach

## FROM THE HELM

Ahoy there Crew!

The Board has been very busy charting lots of positive changes ahead for TDP. Keep watch for a special e-mail in October.

Several members have participated in exciting events this summer and share their adventures in this newsletter.

Mark your calendars for October 18th. Not only is it the last of our quarterly surveys for 2008 and announcement of the 2009-2010 Board of Directors, we've booked a wonderful speaker for our dinner - Stephen McCulloch of Harbor Branch Oceanographic Institute in Fort Pierce, Florida. Be sure to make your reservation even if you can't make the survey.

Hope to see you in October!

Peach

## ELECTIONS

Members are encouraged to nominate members for the upcoming 2009-2010 term. There are 5 positions available so in accordance with the bylaws there can be up to 10 nominees. Nominations are due no later than **SEPTEMBER 10, 2008**. The Election process will begin taking place as soon as the nominations are in. Ballots will be distributed in late September and the new Board of Directors will be announced on October 18, 2008 at the Saturday night social. Members will enjoy a nice meal and have the opportunity to socialize with fellow members as well as discuss and learn about the current happenings of TDP.

Everyone is invited to attend this social and meet the new Board members.

Submit nominations to: Karla Johnson, [elections@tragus.org](mailto:elections@tragus.org)  
5230 Orchard Court, Cumming, GA 30040 770-888-8342

## OCTOBER SPEAKER

**STEPHEN D. McCULLOCH / Founder and Program Manager**

Marine Mammal Research and Conservation Program

Center for Ecosystems Health

Harbor Branch Oceanographic Research Institute at

Florida Atlantic University

Steve began his career training marine mammals in the Florida Keys in 1971 and has more than 30 years experience working within the marine mammal industry and research community. During this time, he has contributed to dozens of special projects, films, research programs and journal publications. In 1997, Steve founded the division of Marine Mammal Research and Conservation at the renowned Harbor Branch Oceanographic Institution and worked to establish programs that support a wide range of multi-disciplinary scientific and conservation initiatives. In order to fund such initiatives, Steve created and passed three Florida State Laws and worked with Florida's Governor to create the Florida Oceans Initiative. Since 1999, through such initiatives, Steve has

## OCTOBER SPEAKER - STEPHEN McCULLOCH continued.....

raised more than \$30 million dollars to support various marine mammal research and related conservation programs throughout the State of Florida.

As a scientific investigator, Steve created and conducts an ongoing photo-id research program that covers 40% of Florida's East coast. During the past decade Steve has managed regional stranding response for more than 200 stranding events and numerous live rescue/interventions. Recently, Steve completed a five-year live dolphin health and risk assessments involving the safe capture, sampling and release of (240) dolphins in both the Indian River Lagoon and Charleston, SC regions. Steve is also an internationally published underwater photographer whose most recent work appears in National Geographic Adventure and Men's Health Magazines.

### LECTURE TOPIC....

Marine Mammals as Sentinels of Ocean and Human Health - a review of a multi-disciplinary research program involving the population ecology, health and pathology of dolphins inhabiting the Indian River Lagoon.

## DOLPHIN RESCUE

As long as we're on the subject of dolphin "rescue/intervention"....

On July 1st, Peach & Roy Hubbard had the privilege of being part of a team that completed a dolphin disentanglement rescue in Savannah (Herb River near Thunderbolt). The team included folks from NOAA, UNCW/Dr. Bill McClellan & Brian Balmer, GA-DNR/Doug Haymans, Jekyll Iland Sea Turtle Center/Dr. Terry Norton, UGA/John (Crawfish) Crawford/UGA, SAV State U. (&TDP) Dr. Tara Cox and HBOI/Steven McCulloch. All together, we were 30 people in 5 boats. It was quite an adventure! A young dolphin had been sighted in the Herb River area in spring of 2007 with a 'rope' around it's neck. It disappeared until June of this year and the 'rope' had become embedded into the dolphin's neck.

The SE Dolphin Rescue Team was assembled and the date set to rescue the dolphin. We were on the GaDNR boat piloted by Doug Haymans (Hub's on the blue crab commission with him). John "Crawfish" Crawford/UGA joined us on the boat. We followed the dolphin for 6 hours - keeping track of it while the other boats arrived from various destinations and made preparations. Through the binoculars, the wound looked horrific and we feared it might be so bad, the little dolphin would have to be euthanized.

Once the team arrived, it took over another hour to find the right opportunity and place to capture the dolphin since other dolphins were suddenly hanging out in the same area - too close. Ironically, all morning the little dolphin had been by itself - for 6 hours! As you know, dolphins are constantly moving... up river...down river, back and forth.



The other dolphins finally kept their distance, so the signal was given for the capture boat to drop it's net into a circle - this is done VERY FAST so the dolphin doesn't escape. The boat takes off like a rocket into a big loop around the dolphin. The net was 200 yards long and 25 feet deep. The top edge of the net has floats and the bottom is weighted to hold it onto the bottom of the seabed. Then a smaller net is tossed on the dolphin to bring it closer to the main rescue boat.



*(The fella with the arm tattoo is Brian Balmer - our July speaker. The fella next to him with the brown backwards cap is Stephen McCulloch - our October speaker)*

We had a big thick mat on our boat which we slid into the water to use as a platform for the dolphin. Some of the experts then entered into the water, which was about 15 feet deep, and helped the dolphin onto the mat. This mat also held SIX guys!!! It had amazing super flotation in it! It was about 8" thick, 8ft wide x 8ft long. Blood and tissue samples were taken. Vitals were checked by Dr. Terry and he removed what seemed to be a rubber gasket at least an inch wide (not a rope) embedded deep into the dolphins neck but which fortunately had not cut into muscle. Had it been rope, it would have caused much more pain and damage. The dolphin was then medicated for possible infection, tagged and sent on its way. It's estimated that the dolphin was about 2 years old.

I had named it "Herbie" while we were following it all morning in the Herb River - but that was before I knew she was a 'she'. I now call her "Wilma" since we actually rescued her in the Wilmington River.

It was an exciting day and a successful dolphin capture & release. Hopefully we'll be invited to more of these events if they occur. Of course, I'd rather we wouldn't have them at all, but they are inevitable since there are always humans around screwing things up.

## BRUNSWICK-SAPELO

By Lori Muskat....

I joined TDP in 2005. Like many of you, I'm a nature lover—and I'd been particularly interested in dolphins since 1996. I was attending a conference in Brighton, England and I met a psychotherapist from Wales who used dolphin-assisted therapy with children who had been abused. He told me he'd been repeatedly amazed by the dolphins' ability somehow to recognize the neediest of the children and to pay the most attention to them, facilitating their psychological and spiritual healing.

My interest in these sea mammals turned to passion on my first TDP abundance survey in July 2005, when I went out with skipper Don Nelson and team leader Herb Joe from Walsh's Dock on Tybee Island. I shall never forget my first sighting of these silvery grey animals gliding through the water; I was unprepared for how taken I would be, and how taken I continue to be by their majesty.

So, imagine my excitement, when—thanks to TDP, I had the privilege to spend four days, August 4–7, with Brian Balmer and his crew in the waters around Brunswick and Sapelo Island. For TDP readers who did not make it to Brian's talk in July, he is a doctoral student at the University of North Carolina, Wilmington.

His doctoral research involves "monitoring abundance, site fidelity, and habitat utilization patterns near a National Priority List (NPL) polluted site and adjacent pristine reference site." This is one of four surveys Brian is doing this year, each of which is 12 days long.

Brian and his crew alternate every two days between zones near Brunswick and Sapelo. Weather permitting, each day's work begins at 8:00 a.m. and continues until the entire zone has been surveyed. Three of the four days I spent with Brian's crew ended between 5:00 and 6:00 p.m. On the fourth day, we had relatively few sightings and were finished by 2:30. Brian uses a workboat of NOAA, which is excellent for sighting and photographing, but it offers precious little shade. The long days in the sun were gratifying as well as exhausting.



*(Brian Balmer with Katy (GA-DNR) and Suzanne)*

My first day out, August 4th, we surveyed Brunswick zones. We had a total of 12 sightings and saw about 40 dolphins, some with very distinct fins. In addition to Brian and his research assistant Suzanne, we were accompanied by Clay George, Director of Non-Game Wildlife of the Department of Natural Resources. I was extremely impressed by both Brian's and Clay's maneuvering of the boat to allow for optimal photographing. It's noteworthy that since Brian is photographing for abundance as well as photo ID, he takes photos from greater distances than we typically do at TDP (and also uses a 300 mm lens). If distant photos are in crisp focus, they can be digitally enlarged and might still be used for photo ID.

On August 5th, we surveyed other zones in the Brunswick area. We had a total of 8 sightings and saw about 20 dolphins. However, we also saw four alligators as well as a group of 4 or 5 manatees who seemed to be playing gently not far from the bank of the marsh.

Day 3, August 6th, was the most exciting in the zones around Sapelo. We had a total of 13 sightings and saw approximately 109 dolphins. But, by far, the greatest sight of the day was that of four dolphins lifting a four foot shark out of the water. Just prior to seeing this happen, we'd seen a dolphin with what appeared to be a fresh shark bite just behind its dorsal fin. As things tend to do on the water, it all happened in an instant, and Brian was not sure what type of shark it was. In addition to the dolphins with the shark, we also saw a sea turtle, several tarpon, and a large ray.

After the amazing sightings on Wednesday, Thursday was anti-climactic in the waters around Sapelo. We had a total of 6 sightings and saw about 17 dolphins. After four days baking in the sun, being off the water by 2:30 was a welcome respite.

In addition to photographing fins for ID and getting an overall count of the number of animals, Brian's team also records the number of calves and neonates. Similar to what we do on TDP surveys, behaviors are noted and an attempt is made to draw distinct fins or other unusual markings. At each sighting, the water temperature, depth and salinity are measured and recorded. These measures are also recorded at a number of different predetermined transects in order to track environmental trends.

Despite the baking sun, absence of plumbing, a steady diet of peanut butter and jelly sandwiches and bath temperature drinking water, this was an amazing experience. An unexpected benefit was how much my photography skills improved given the massive practice I had over the four days. When I first started photographing for TDP, I was happy when I managed to capture fluke marks or any other evidence in the water that a dolphin had been there. I now almost always get at least part of the dorsal fin. When I attended that first training in 2005, I never dreamed that the sound of chuffing would become one of my favorite melodies. And who would have guessed that I could spend endless hours, tirelessly waiting like some kind of dolphin paparazzi, for those odd triangles to break the surface of the water.

## EDUCATION OUTREACH

TDP has an Education Outreach program which we bring in to schools and organizations across the state. We have 3 versions geared for grades K-4, 5-8 and 9-12(adult). If you know of an organization or school that would be interested, put them in touch with Peach Hubbard c/o GAdolphin@comcast.net or 912-727-3177

## JULY HONOR ROLL

Many thanks to all those who participated in the July survey:

Sandra Bath	Trace Hartman
Libby Brinkman	Herb Joe
Dejah Burcham	Charlotte Keenoy
Starr Camp	Lori Muskat
Jonij Chastain	Joe Olive
Lea Clements	Joe Powers
Barbara Conway	Waynbe Propkop
Amnda Coward	Angela Sarumi
Walt Coward	John Scanlan
Anna Crawford	Amy Lee Schneider
Britton Hammett-Mc-Curry	John Severance
Joe Ginett	Sandy Stevens
Kathy Ginett	Deanna Taylor
	Cheryl Tilton

## SEPTEMBER CALENDAR

### TDP TRAINING

Saturday, September 6

### GREYS REEF OCEAN FILM FESTIVAL

Thursday, September 18 - Sunday, September 21

<http://graysreef.noaa.gov/>

### CLEAN COAST Wassaw Island cleanup

Saturday, September 20

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

## OCTOBER CALENDAR

### GA-DNR COASTFEST in Brunswick

Saturday, October 4

<http://crd.dnr.state.ga.us/content/displaycontent.asp?txtDocument=1052> Monday, October 6 - Saturday,

### BRUNSWICK-SAPELO SURVEY

with Brian Balmer

October 18

### GEORGIA'S COLONIAL COAST BIRDING & NATURE FESTIVAL, Jekyll Island

Thursday, October 9 - Monday, October 13

<http://www.coastalgeorgiabirding.org/lodging.htm>

### GREAT OGEECHEE SEAFOOD FESTIVAL

Friday, October 17 - Sunday, October 19

Richmond Hill. <http://www.goseafoodfestival.com/>

### TDP SURVEY

Saturday, October 18 - Sunday October 19

Dinner speaker: Stephen McCulloch / HBOI

## RESPECT DOLPHINS

*Barbara Conway submitted a 'Letter to the Editor' at the Island Packet newspaper, South Carolina:*

### RESPECT AREA DOLPHINS BY LEAVING THEM ALONE

Recently I had the pleasure of leading a project team as we surveyed dolphins in Calibogue Sound, May River and Broad Creek.

Although many people show respect for these marvelous creatures, there were some problems. We saw several young men attempting to throw a cast net over a small dolphin from a dock at the entrance to Broad Creek. We saw others banging hands against the sides of boats to attract the dolphins and sticking their hands out to touch them, a very good way to get bitten. Remember, the Atlantic Bottlenose Dolphin, while highly socialized, is still a wild animal.

Each time we witnessed harassment, we asked individuals to stop and informed them they were violating the Marine Mammal Protection Act. We reported the cast net men to the SC Department of Natural Resources, which is investigating.

I can only hope that what we saw came from simple ignorance and not malice. But many dolphin in the area are provisioned by people. They approach boats, beg shamelessly for food and disappear with a tail slap when no handouts appear. These animals have lost their fear of humans. This makes them subject to injury from boats or ingestion of poisonous or toxic materials. It fosters aggression among other dolphin and prevents youngsters from learning to forage for live prey.

the dolphins here are precious natural resources protected by law. If you witness violations, please call the SC Natural Resources at 800-922-5431. An if you would like to get involved with monitoring our dolphin population, go to [www.thedolphinproject.org](http://www.thedolphinproject.org) to learn more.

## DUES R DUE!

TDP needs your support and you can help by keeping current with your dues. It takes many volunteer man-hours to send out reminders, so if you know your dues are not paid to date, please send them in to

**The Dolphin Project**

**P.O.Box 60753, Savannah, GA 31420**

## GEORGIA COAST IN PERIL

NOAA is leading a multi-agency team\* in a research project to access the health and contaminant exposure in Bottlenose dolphins in two salt marsh estuaries in Georgia: 1) a National Priority List polluted site – Brunswick [Turtle/Brunswick River estuary]; 2) a nearby pristine reference site – Sapelo Island National Estuarine Research Reserve. Comparing the dolphins in these two sites is critical for both accurate interpretation of health data and making informed management decisions. They are performing quarterly mark-recapture surveys in conjunction with dorsal fin Photo-ID. Brian Balmer, who spoke at The Dolphin Project dinner on July 19th is leading this project on site.

The August surveys have just ended and they will start again in October. Dolphin Project members have been invited to assist Brian as observers on his surveys. For more information on participating contact Peach Hubbard at [GAdolphin@comcast.net](mailto:GAdolphin@comcast.net)

## DOLPHIN BUBBLE RINGS

Bottlenose dolphins show a strong propensity for gregarious behavior with physical objects -and each other. Dolphins can produce their own objects of play called 'bubble rings'. During these events, dolphins expel air from their blowhole and the expelled air rises to the surface in a ring like form.

Air-breathing dolphins always produce bubbles when they expel air underwater. Breathing in dolphins, unlike in other mammals, is solely under voluntary control, a crucial feature in their adaptation of a truly aquatic existence. Whereas the physics of ring formation is straightforward, the actual production of stable rings may require some practice, expertise and forethought by the dolphins

Dolphins frequently manipulate their bubble rings by generating vortices around the objects which cause the bubble rings to turn vertically by 90 degrees or flip horizontally by 180 degrees. Bubble play can result in a sequence of two bubble rings, such that the second bubble ring joins the first one to make a larger ring, which is further manipulated. Sometimes a third smaller ring extrudes from the large ring from the force of impact of the first and second bubble rings.

Invisible spinning vortices in the water are generated from the tip of the dolphin's dorsal fin when it is moving rapidly and turning. When dolphins break the line, the ends are drawn together in a closed ring. Air is injected into the ring via bubbles released from the dolphin's blowhole. The energy of the water vortex is enough to keep the bubbles from rising for a few seconds of playtime.

*Bubble Ring Play in Bottlenose Dolphins: Implication in Cognition, published in the Journal of Comparative Psychology*

To see the dolphins play with bubble rings - go to: [www.youtube.com/watch?v=TMcf7SNUb-Q](http://www.youtube.com/watch?v=TMcf7SNUb-Q)