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The Newsletter of Dolphin Research Center

January/February 2015

SURVIVOR STORIES: JAX, LOUIE, AND LINA

In March of 2007, in Jacksonville, FL, a few people noticed something strange through the window of their office building. It was a small dolphin, swimming all alone in the St. John's River. They saw that the top half of his dorsal fin was completely missing, with a fresh wound. Rescue authorities were called and came out to assess the little dolphin's situation. They monitored him for



Photo by: Arielle Valle Unlike when she was alone in the wild, Lina is thriving at DRC.

The International Marine Animal Trainers Association (IMATA), is an organization where facilities, trainers, students, and supporters from all over the world "come together to foster communication, professionalism, and cooperation among those who serve marine mammal science through training, public display, research, husbandry, conservation, and education". Each year IMATA holds an annual conference where about two days. He appeared to be less than one year old, had injuries to his tail and right pectoral flipper, and had gashes on his body. He was much too young to be on his own, but his mother and pod were nowhere to be found. He had lesions on his skin from the fresh water. (Dolphin skin is adapted to salt water, and if they go into freshwater at all, it is normally only for brief foraging trips.)

It was determined by National Marine Fisheries Service that he would not survive much longer on his own. With the help of Harbor Branch Oceanographic Institute, Mote Marine Lab and Marineland he was rescued from the river and taken to Gulf World Marine Park in Panama City, FL for rehabilitation. In honor of the location where he was rescued, he was named Jax after the city of Jacksonville. Gulf World's staff worked around the clock to care for the little guy, and about nine months later he was completely back to health! It was an amazing recovery. Officials from the

A WEEK AT IMATA

representatives from different facilities give presentations about their new training adventures, research breakthroughs, new husbandry training and techniques, as well as other topics dealing with their facilities and animals.

This past September, the conference was held in Orlando, Florida. It was a particularly exciting conference to attend not only because Orlando is home to Disney World, SeaWorld, and



Photo by: Lauren Pickara It's hard to believe that it's already been seven years since Jax joined the DRC family!

National Oceanic and Atmospheric Administration (NOAA), the government organization that makes all decisions about stranded and rescued marine mammals, evaluated him and found that he was not a candidate for release back into the wild.

He was so young that he should have had another few years with his mother to learn how to hunt and survive in the wild. Since he was found alone, there was no way to reunite him with his mother. NOAA determined that he should be adopted by a human care

Survivor Stories, see page 2

Universal, but also because IMATA paired up with the Association of Zoos and Aquariums (AZA) for the very first time, bringing together the zoo community and the marine mammal community. Both conferences ran concurrently, so attendees had the opportunity to attend both IMATA and AZA presentations, taking home new ideas learned from both the marine and terrestrial animal fields of training.

IMATA, see page 3

Thirty Years of Teaching...Learning...Caring...for Marine Mammals and Our Environment

BECOME PART OF THE ADVENTURE

- Dolphin Research Center is a not-forprofit organization that conducts innovative research and education projects. We invite you to join our unique family by becoming a member of the Dolphin Society. As a member, your tax-deductible donation will help us provide the best environment and care humanly possible for the dolphins and sea lions who call DRC home. Your membership will also support our manatee rescue program and provide the educational programs that encourage our guests to become ambassadors for all marine animals and the environment we share. Annual memberships are available in several levels:
- Individual (\$40 for adults, \$25 for fulltime students with proof of enrollment) – receive a subscription to the *Dolphin Society* newsletter, our e-newsletter, a 10% discount on most gift shop items, free admission for one to DRC for one year, and one free guest pass.
- **Trio** (\$75) receive all the benefits of an individual membership plus free admission to DRC for up three people for one year.
- **Gray Cross** (\$90) receive all the benefits of the Trio membership plus a subscription to our quarterly *Gray Cross* newsletter and free admission to DRC for up to four people for one year.
- **Sponsor** (\$150) receive all the benefits of the Gray Cross membership plus the opportunity to sponsor a narrated session at DRC and admission for up to five people for one year.
- Research Team (\$500) receive all the benefits of the Sponsor membership plus receive a personal tour of the Research Tower (by appointment) and admission for up to six people for one year.
- Memberships can be purchased via our website at **www.dolphins.org**, by phone (305) 289-1121 X229, or by mailing your check or credit card number to DRC, 58901 Overseas Highway, Grassy Key, FL 33050. Please note that memberships are not transferable and the member must present photo identification for admission.



Survivor Stories, from page 1 facility. Dolphin Research Center had a good social situation for him, with several youngsters close to him in age. We were selected to provide him a forever home. First introduced to Tursi and her calf, Gypsi, Jax was welcomed into the family.

A few years later, in the wake of the massive 2010 BP oil spill in the Gulf of Mexico. Coast Guard personnel were walking the beaches in Louisiana, searching for stranded and injured wildlife. They came across a baby dolphin, stranded in the marshes and covered in oil. Looking him over. they feared that his chance of survival was slim, but they did not give up on him. Instead, they quickly put a rescue operation in motion. They shaded him and protected him from the rising tide until marine mammal rescuers arrived on the scene. He was transported to the Audubon Center in Louisiana for rehabilitation. It was touch and go at first, but after just four months of rehabilitation, he was healthy and ready to go to a forever home. He, like Jax, was deemed un-releasable due to his young age and lack of mother to care for him. DRC opened our arms to this little survivor and he became a member of our family in 2011. He was named Louie, as a tribute to his Louisiana roots.

That same year, a young sea lion was found stranded on the California coastline. She was malnourished and underweight, so she was taken to the Marine Mammal Care Center at Fort MacArthur in San Pedro, CA, for rehabilitation. At the center, staff got her back to health by feeding her live fish to encourage her to learn hunting skills. When she seemed ready, she was released back into the wild, near the area that she stranded.

She was tagged so that they could keep track of her and ensure she was doing well. Not too soon after she was released though, she was found stranded and underweight again. It was clear she had not been hunting on her own. So, they took her in, fed her up, worked on her hunting skills, and re-released. She stranded again. This pattern of rescuerelease-restrand happened a total of five times! The last time she was released she was taken all of the way out to Catalina Island, several miles off shore. Once more, she stranded and was found walking up the steps of a Malibu beach house begging for food. After the final event, they took her back



Photo by: Katy Donegan Louie's story is a strong reminder of how man-made hazards affect all marine life!

into human care. It was clear that despite everyone's best efforts, this little sea lion was unable to adequately forage on her own. She was officially deemed un-releasable and put up for adoption. Dolphin Research Center was very excited to be chosen. We renamed her Lina and welcomed her into our family.

All three of these rescued and adopted family members are thriving here at Dolphin Research Center, and help us make a huge difference for marine mammals around the world! Jax loves to participate in our Wounded Warrior Project programs. After he'd been with us for a while, his scars were looked at by shark scientists who determined he had most likely been attacked by a juvenile bull shark. When soldiers and veterans come to visit and interact with the dolphins, they

Survivor Stories, from page 2 are often inspired by Jax's story. He experienced a traumatic shark attack and lost some parts of his limbs, yet he recovered and shares his joyful attitude with everyone he meets. Louie helps us to educate guests about environmental hazards. Oil spills like the one that affected Louie may be beyond our immediate control, but there are plenty of conservation actions that people can take in their everyday lives to protect marine mammals from many other toxins that pollute the water.

Lina's story highlights to IMATA, from page 1

While there is a lot of learning and business during IMATA conferences, we all make time to have fun as well. We started off the week with SeaWorld hosting all of the IMATA members for a day of fun at the park. We were invited to see presentations with the killer whales and their enrichment sessions, a rescued orphaned manatee, and the pilot whales that were rescued a couple of years ago. In the evening, the park closed to all guests except for conference attendees and we were able to enjoy the rides and animal exhibits in a more intimate setting.

Dolphin Research Center was well represented at the conference by multiple trainers, research staff, education staff, and more, since Orlando is only about a six hour drive from the Florida Keys. We also had the honor of giving multiple presentations to the attending members.

Loriel Keaton, Director of Animal Care and Training, presented on new husbandry training she did with Kilo, our resident 13 year old male California Sea Lion, titled "Training a Male California Sea Lion for Voluntary Protected Contact Radiographs". We occasionally need to get diagnostics on the animals that we cannot obtain simply by looking at them and we need to go a step

guests the dangers of human interaction with wild animals as well as the plight of overfishing and how it may affect marine mammal nourishment. We will never know exactly why Lina was unable to hunt, but it's very possible that her mother had learned to beg for food from people and never taught Lina to hunt on her own. Jax, Louie, and Lina may only be three animals, but people who learn from them come away inspired, and go on to teach others. The global impact that just three animals can have is astounding!



Photo by: DRC staff Kelly Jaakkola's presentation fascinated the audience at the IMATA Conference. further. With Kilo, it was decided to train him to voluntarily do these radiographs. This included acclimation to the x-ray machine by making mock ups of the machine, having Kilo in the right position for the x-ray, and getting him used to having many people in his house, including the radiograph technician. We were happy to present that, while there were some ups and downs during training, like Kilo breaking the x-ray plate, we were successful at getting radiograph images.

Kirsten Donald, Director of Education and Director of the College of Marine Mammal

IMATA, see page 4

Adopt-A-Dolphin

- You can sponsor your favorite dolphin or sea lion at DRC through our Adopt-A-Dolphin or Sea Lion program. Experience the warm feeling that comes with knowing that you are helping to provide for the care and feeding of your friend. Your tax-deductible donation for a membership will help us to fulfill our promise to provide the finest home humanly possible for our marine mammal family. Memberships are available is several levels:
- **E-Dolfriend** (\$25) receive an electronic membership that includes a subscription to our monthly e-newsletter and an e-mailed full-color certificate with your favorite dolphin or sea lion's picture and a biography about your friend you can print out at home.
- **Dolfriend** (\$50) receive a subscription to the *Dolphin Society* newsletter, our e-newsletter, a 10% discount on most gift shop items, a color certificate with your dolphin or sea lion's picture, a biography about your friend, free admission for two to DRC for one year, and one free guest pass.
- **Pod Pal** (\$100) receive all the benefits of a Dolfriend membership plus a subscription to our *Gray Cross* newsletter and free admission to DRC for up to four people for one year.
- Parent (\$240) Provide the ultimate support for your friend by pledging \$20 per month to sponsor one of their meals each month. You will receive all the benefits of a Pod Pal membership plus free admission for up to five people for one year and silver bucket stickers for your certificate to represent the meals you provided for your dolphin or sea lion friend.
- Adopt-A-Dolphin or Sea Lion memberships make a great gift and can be purchased via our website at **www. dolphins.org**, by phone (305) 289-1121 X229, or by mailing your check or credit card number to DRC, 58901 Overseas Highway, Grassy Key, FL 33050. Please note that memberships are not transferable and the member must present photo identification for admission.

www.dolphins.org

Innerspace or cyberspace, the dolphins of Dolphin Research Center look forward to your visit.

IMATA, from page 3

Professions, and I presented a poster on the college at DRC. Under the theme of "How to Train Your Trainers", we took the attendees through the timeline of what the students learn throughout their time with the college and the various experiences they have while attending. We further demonstrated the differences between the college and an internship such as various classroom lectures, time spent on the docks interacting with the dolphins and sea lions, as well as experiencing public presentations and guest interactions with the dolphins.

Emily Guarino, Administrative Director of Research, presented a poster as well, titled "Quizzing the Minds in the Water -Training a Game to Learn about Dolphin Cognition". Emily discussed that the quiz is studies of cognition asking how dolphins think. Training and testing a concept involves a lot, including logistics, the use of cues to convey information, the need to control for social cuing, and the difference in training versus testing. Finally, she discussed the importance of cognition research not only for science, but also for the public. It is human nature to care more about animals with which we connect and understand. Because of this, cognitive studies inspire conservation and positively influence how human behavior affects dolphins and their environment.

Director of Research Kelly Jaakkola presented on a new research project that is being conducted at DRC involving whistle communication between mother dolphins and their calves. Since we are still in the beginnings of this project, we have a lot to learn about the communication between mothers and calves and look forward to sharing our findings with the marine animal community at future conferences.

The career fair was also a highlight of the event. DRC was inundated with people inquiring about jobs, internship and volunteer opportunities and the College of Marine Mammal Professions. We were the last booth left standing that night! Each year the IMATA conference comes to a close with an awards banquet and ceremony. There are numerous awards given from different categories. This year the research poster Emily presented won second place. This banquet was especially exciting for DRC because Linda Erb, Vice President of Animal Care and Training, took her official position as President of IMATA. The gavel was handed over to her and she is now keeping busy with all of her presidential duties.

Everyone at DRC enjoys attending the annual IMATA conferences, from making new friends from around the world to learning the endless possibilities of marine animal training. Many staff members are starting to get more involved with the organization and always use presentations as a learning experience. We are looking forward to see what trainers and facilities have learned throughout the coming year when the IMATA 2015 conference is held at Atlantis in the Bahamas.

-Jamie Stevens

Imagine your class enters a science fair and the grand prize winner comes to Dolphin Research Center (DRC) to work with our team. This was exactly what Key Largo Elementary School won as the proud first place winner of The Fairchild Challenge. DRC was very excited to take part in providing 'the prize', which included not only distance learning, but also a science related hands on event for the students to learn from and enjoy. The Fairchild Challenge is an educational program that was created by Fairchild Tropical Botanic Garden located in Miami, Florida. This event is an

FAIRCHILD CHALLENGE



The students and teachers observed several dolphin sessions, learning more about research and the animals themselves.

> interdisciplinary environmental competition designed for students and their teachers. Every year they receive a menu of challenges to participate in that incorporate

STEM (science, technology, engineering and math). art, writing, and other scholastic topics with the goal of accumulating 1,000 points or more for their school. The Botanic Gardens at Kona Kai Resort are a Satellite Partner of Fairchild Garden and the proud sponsor of the Upper Keys Fairchild Challenge, coordinating the events and judging for students in the Upper Keys region. The 2013-2014 school year marked

the third year anniversary of this engaging program and more than 900 students, 50 teachers and six schools participated from the

Fairchild Challange, see page 5

Fairchild Challange, from page 4 region.

On October 6th, Dolphin Research Center connected with both the 4th and 5th grade classes at Key Largo Elementary from the Distance Learning Studio, located in DRC's Sanger Family Hall. The overall goal was to teach the students about marine mammal science, explain how research is conducted at DRC, and identify why our research findings benefit wild dolphin counterparts. On October 8th and October 9th.

the 4th and 5th grade students came to visit in person for an immersive, hands on experience.

The students had the opportunity to watch a dolphin narration which included DRC's research. Members of the Research department joined the dolphins on the docks to play cognition games, showing off how we learn about their intelligence. The

students also took part in a variety of workshops, all of which bridged back to what they learned in their Distance Learning courses.

In the echolocation workshop, students observed a bottlenose dolphin to understand how their anatomy lends itself to echolocation. Students also used tuning forks and their own bodies to understand how sound may be transmitted through the lower jaw. Since hearing is a dolphin's primary sense, it is important to understand how the noise generated by human activities can impact marine mammals in the wild.

At the rescue station, students conducted a mock rescue of an inflatable dolphin. Through this activity, students learned how team work and critical thinking are integral to the successful rescue of an animal. They were also able to learn what to do if they find a stranded animal and how the information we collect from a stranding event increases our knowledge base. It was also important for the students to see how this allows us to improve our care for stranded animals and how human activities can impact marine mammals.

The students were also given firsthand experience on the critical



we learn about their *Even though the dolphin they protected was an inflated toy, the students took their rescue responsibilities seriously!*

thinking and problem solving skills needed in training cognitive games to the dolphins. In this session, the students divided into pairs with one student taking on the role of the "trainer" and the other taking on the role of the "dolphin". The trainer gave the dolphin a list of words with the intention of the dolphin separating them by whether or not the word began with a vowel. However, the two parties could not speak to one another.

It became the trainers' job to figure out how to communicate what they wanted to ask and how to reinforce the correct behavior. In turn, with no direction, the dolphins needed to think about their actions and what behavior resulted in a form of reinforcement. This game was similar to DRC's Match to Sample study where we test whether the dolphins, if given the choice between two separate items, can match the sample they are originally shown. This demonstrates how the research that is conducted at DRC cannot be done in the wild and is of the utmost importance when piecing together the full picture of the lives of dolphins.

The other workshops focused on a variety of concentrations

here at DRC. During the observation workshop, students learned about the observational research that is conducted here on a daily basis. In participating in this station, the students learned that the key to quality scientific investigation is accurate observation.

Students were able to act as junior scientists and see how being clear in writing is very important to the collaboration of researchers by participating in the

operational definition station. Here the students had to

develop a clear definition of what constituted a dolphin jump. Our scholarly visitors also got to try their hands at field biology. Some students participated in a paleontology dig and others participated in a mock field study using quadrats to understand how scientists may work in other environments to answer questions about the natural world.

DRC was thrilled to welcome this group of students. We are very happy to be a part of the Fairchild Challenge. In working with this extraordinary group, we are able to continue our mission of teaching, learning and caring for marine mammals and instilling these values to a new generation of students.

-Kim Browne

A.J. and Tanner - After a brief period of living in separate lagoons, A.J. and Tanner are back together again. The boys spend lots of time playing and socializing.

Aleta, Diva, and Santini -



Photo by: Arielle Valle Cayo pays attention when the trainers give her signals.

Aleta and Diva joined the rest of the large maternity pod in the front lagoon. They were immediately greeted by all of the youngsters who were eager to meet their new family member. Santini was quick to swim in stride with her sister, and seemed to be helping Aleta chaperone Diva around her new habitat.

Calusa and Pandora -During an enriching session with their trainer, Calusa and Pandora had fun playing with a brush. The trainer held it out and gave the girls lots of rubdowns. When the



Photo by: Myles Valle

Calusa and Pandora loved sharing their massage session.

Pod Updates

trainer decided to toss out the brush for the girls to retrieve, they swam to where the brush floated, but did not bring it back. Instead they started rubbing against it, just out in the middle of the lagoon.

Clearly they were not done with their massage.

Cayo - Cayo has started to learn more complex behaviors, including those given on a verbal signal. Just like her older sisters, she now knows how to start doing a spiral dive when prompted by the trainer yelling, "Spin" when she is already out doing her front dives.

Delta and Flagler – These young guys are getting used to wearing eve cups

which are soft latex cups that we place over their eyes to showcase their ability to echolocate. Just like with all training, we keep things fun and at one point the trainer asked each boy to wear an eve cup on his head, like a small hat. The cups didn't bother them at all, of course, and Delta and Flagler appeared to like the game. They even sank underwater and then surfaced from beneath a pile of sea grass in the lagoon. The sea grass around the "hat" looked like

a head of fake hair.

Gambit -

During a session with his trainer, Gambit swam away from the

dock. Out of nowhere, he came back with a small flounder suctioned to his melon! He seemed completely unfazed, and did not even notice when the trainer peeled it off his head.

Gypsi - Gypsi

enjoys minnow fishing at the perimeter fence line. When the CMMP students came down on the docks to visit in the middle of her hunt, Gypsi brought them part of her catch.

Jax - Jax meets lots of wounded warrior soldiers and their loved ones. His story is an inspiration to all, but it is especially touching to see him connect with those who have gone through struggles in the past, and who might have suffered injuries. Warriors often comment to us that Jax doesn't let his previous difficulties get him down!

Louie - A trainer was walking by the front lagoon when she heard happy sounds from a dolphin. She spotted Louie lying on the inwater rub rope, screaming for joy. The trainer got his attention and gave him the signal for slip and slide, Louie got super excited and slid across the rope into the deep water.

Luna - Luna noticed a shrimp



Photo by: Arielle Valle Luna was all smiles after swallowing her shrimp snack.

swimming across the surface of the lagoon. She went after it and popped back up to the dock with her mouth open. The shrimp was on her tongue, and as soon as the trainer got a look, Luna swallowed it and went on with her program.

Karen and Diamond -

Podupdate, see page 7

Podupdate, from page 6

Karen and Diamond met a short time after Diamond's arrival, and they have been inseparable ever since. Diamond follows Karen around the habitat and loves to sun bathe with her in the afternoons.

Kilo and Lina - Kilo has always loved the bottom stair in the outdoor sea lion habitat. Recently Lina has also taken a liking to the same spot. Even though Kilo is much bigger and could easily protect his resting place, Lina always seems to find a way to squeeze her way in and move Kilo one step higher.

Merina and Windley -

During a training session, Windley was not particularly interested in her fish, and was spitting them into the water. Merina started to take



a way to squeeze her way in and move Kilo one step higher. *Rainbow creates quite a wake when he speeds around the lagoon.*

Pax and Talon - During a Dolphin Dip, a group of participants got a surprise from Pax and Talon during their imitations. Pax's trainer gave him the

imitate signal, which

looks like a karate



Merina and Windley enjoy diving together.

advantage of this, eating the scraps. After her trainer asked her to be polite, Merina continued scooping up fish that Windley discarded, but instead of eating them, she handed them back to the trainer.

Molly - One of Molly's trainers from a previous facility came in for a visit to say hello to his old friend. He asked Molly for some of her old behaviors, which she remembered right away. She even retrieved a quarter that he threw out into the lagoon like she used to years ago. attacked their victims. It was all in good fun and the guests were excited to have both boys in on the splashing!

Rainbow -

Rainbow was doing speed runs during an upbeat session with his trainers. To change things up, they decided to run along the boardwalk and race Rainbow as he swam

chop, and asked him to copy what the guests were doing. He ended up going out for a breach, which awed the participants. While they were still clapping for the spontaneous behavior, Talon came over on his own and began splashing them wildly. Following him, Pax showed up and the brothers completely sneak

Tursi loves playing nanny to little calves!

along the water. Rainbow loved the excitement and swam faster each time to beat the trainers.

Reese - Reese has learned how to giggle, and now he will not stop! Regardless of what behavior he is asked for, he adds on a cute little laugh.

Sandy - Sandy's trainer tossed toys out into the lagoon. He got very creative and when a ball was tossed out, he would balance it on his rostrum and bring it back to the dock that way.

Tursi - Before Diva moved up to the front lagoon, she lived with Mom Aleta, auntie Merina, cousin Windley, and her nanny, Tursi. Tursi took to being a great nanny to Diva, and the two would often be found swimming in pair. Now, Tursi is focusing on Windley, and is having a blast with the kiddo.

-Danielle Brown

Have our dolphins inspired you? Email your stories to us at fins@dolphins.org.

January/February 2015

Photo by: Arielle Valle

Spotlight on Louie

Of the 24 dolphins in the Dolphin Research Center family, five of them were not born here in our beautiful, natural lagoons. Three arrived here after living at other facilities and two were rescued. Louie was one of those two dolphins found in the wild in dire straits.

When we opened our hearts to this baby dolphin, we had no idea what a goofy, affectionate, and

charming young man he young would soon grow up to be.

Today, he is estimated to be around five years old and lives in our large front lagoon with all of his best friends.

Louie has proven to be a unique individual in every way, from how his skin looks, to how he communicates with his dolphin and trainer friends. In fact, his personality facets are so distinct that he has earned several nicknames that help describe his quirks and qualities!

"Literal Lou" - When it comes to the world of communication, with Louie everything is black and white. If you train Louie that pointing to the right means he should swim over to the dock on our right, then the next time you have a swimmer sitting on the tray to the right and you point Louie over to them, you better not be surprised when he bypasses them and pops up at the next dock with a proud, smiling face! These moments with Louie sure do bring lots of laughs. He is also a great sport and works hard to figure out his trainers' games. The more we work on these things, the more excited he gets and the more we hear his loud, raspy shouts of delight.

A game that is sure to get



dog among his lagoon mates! Without so much as a blink of an eye or twitch of the head, Louie can produce an invisible force field around himself that none of the youngsters, and sometimes even teenagers, dare to cross. He usually puts this technique to use during training sessions simply because of his love for one-on-one time with his human buddies.

Louie's such a charmer. Hearts melt when he pops up and grins.

Louie fired up is Match-to-Sample. Turns out, a literal perception is handy when it comes to research games. Louie not only has fun, but is also quite successful in games where the answer is simply either correct or wrong.

This trend extends into his medical training as well. For Literal Lou, these medical games are super fun and he has done very well learning all sorts of new voluntary medical behaviors over the years. Once he figures out the parameters of each behavior, he does them with expertise and pride.

"Lazy Lou" - Louie is not one for guessing. If he misses something or doesn't understand, instead of making something up he prefers to wait for more information. Sometimes, his attention without action gets interpreted as laziness. Since this happens quite a bit, Lazy Lou is our endearing name for this side of him. We also use it when we find him lounging around on the fire hose that is spread across an area of our front lagoon, as if it is his hammock in paradise.

"LouDog" - This is the social side of Mr. Louie. From an outsider's perspective, it may be hard to tell that he is quite the top

We also see him flexing his muscles in between sessions while sliding around on the floating docks! He is a big show off, and what better way to get attention than to slide across the docks to catch some rays and ride that wave of adrenaline. Sometimes he stays on the dock, wiggles to the edge, and then sticks his head in the water to whistle taunting playful sounds to his best friends. As much as Delta, Luna, Gambit, and Flagler try to take his place as king of the hill, LouDog is the top dock surfer of the year!

"Silverback Lou" - Perhaps his extra time spent on the docks has helped him work on his tan. Yes, his tan! If you did not already know, dolphins can get suntans just like we can! Silverback Lou is certainly the darkest shade of gray. August is one of the hottest months of the summer down here in the Florida Keys. This past August, Louie joined Rainbow in the dolphin sunscreen club. Most days he would enjoy a morning zinc backrub. For our sunbathers' stylin' pleasure, our medical team mixed up a batch of all natural grey zinc dolphin sunscreen. Thus, Silverback Lou was coined.

Research Corner



Photo by: Lauren Pickard

Co-Founder/COO Mandy Rodriguez's location inside the blind means he doesn't know which board displays the correct answer in this numbers study

At DRC we are committed to helping build a genuine understanding of dolphins' true cognitive skills and capacities. Dolphins and other animals can be quite proficient at picking up on body language cues from people, so when devising a research study it's important we take that into account in order to provide the necessary controls.

Often people aren't even aware of the slight physical or facial cues they may offer. In the early 20th century an amateur horse trainer believed his horse Hans was able to solve math problems and other intellectual tasks by stomping his foot the correct number of times. After further observation it was determined that Hans wasn't coming up with the answers by himself, but was actually watching and reacting to the body language cues of the humans around

him. He would stomp his foot until he noticed his trainer's posture or facial expression change, slightly unbeknownst to them, cuing him to stop. So while he was proving to be intelligent, it wasn't

in the way people originally believed.

The "Clever Hans Phenomenon", as it became known, has had a big influence on animal cognition research. If you've ever watched a research session at DRC you've probably seen or heard us talking about "blinding", or controlling the study. This is a way to prevent inadvertently cuing the dolphins to the right answer. One way we often blind a study is by having the person asking the question not know the answer. We develop research apparatus that prevents the trainer from seeing or knowing the correct answer in order to keep them from accidentally giving hints. This way we know the dolphins are answering the questions we've asked them, and not reacting to cues that lead them to the answer.

Have a research question? It might be the topic of our next "Corner". Email them to: research@dolphins.org.

-Katy Donegan

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Spotlight on Louie, from page 8
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Not only did Louie survive his early ordeal, but he's grown, learned and thrived.

At the end of the dav. Louie is really just a big ol' cuddle bug. Ever since he became part of our family, he's shown a strong affection towards his human friends. Some of his favorite moments these past

five years have been spent staring into the eyes of his trainers as they cuddle him in the water. Whether he is gazing up at an old friend, his adoring fans, or a brand new face, Louie is sure to charm and inspire.

By Christina Tilley

If you'd like to adopt Louie or another member of the family, please visit Memberships & Donations at www.dolphins.org.

What Marine Mammals Teach US: Husbandry and Behavioral Research

As a Dolphin Research Center member, you are supporting a research program that encompasses cognitive, behavioral, and husbandry studies. All of these studies enrich our knowledge of our individual animals, allowing us to take the best care of them. However, you may not know that the research conducted at marine mammal facilities complements what we know about wild marine mammals. This often leads to new knowledge that can help assist or protect wild species.

Husbandry studies in human care have helped us understand things that can be hard to study in the wild, such as how an animal's dietary needs fluctuate with growth, age, season and more. There are many places in the world where various marine mammal species compete with humans for particular types of fish. In some areas there is scientific speculation that depletion of prey species is a possible cause of marine mammal population decline. The Hawaiian monk seal is one such species. By observing the dietary needs of animals in human care, how they change over time and with their activity levels it can give us a window into what a population needs to sustain itself.

Developing baselines through gathering husbandry samples (blood, fecal, urine, respiratory) from animals in human care have helped our understanding of what a healthy animal's parameters should be. DRC participated in such a study regarding immunology. These kinds of studies can help veterinarians when responding to a marine mammal stranding.



Observational research DRC does on calves like Diva and Windley (shown here with their mothers Aleta and Merina) provides information useful to scientists who study or rescue wild dolphins.

Comparing baselines can help possibly determine whether an animal stranded because it was sick or due to a completely unrelated reason.

One of the most enjoyable things we get to observe and take data on is related to mother-calf interactions. We often see the babies nursing. Nursing information, if collected and analyzed in lab studies, can assist stranding response teams to estimate how

often a stranded nursing calf might need to receive formula. Additionally facilities have collected and analyzed actual milk samples from nursing moms which has led to an understanding of the enormous amount of fat and calories the milk contains that calves need to receive, another piece of helpful

information to veterinarians and stranding response teams.

We would know very little about the hearing of many species of marine mammals without those who have been ambassadors in human care. Studies on manatee hearing at facilities led scientists to believe that manatees have a difficult time hearing recreational boats that move at low speeds, causing them to be at risk of boat strikes.

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pingers that emit sounds manatees can hear that have been placed on boats. Manatees exposed to boats equipped with these devices reacted by moving away.

Dolphin Research Center's cognitive studies are quite fascinating. We are one of the few facilities where you can watch our dolphins play thinking games which help us understand a little of what goes on inside their minds



Delta, Gambit, Flagler and all of the DRC dolphins teach us about their species. This knowledge is shared world-wide.

What Marine Mammals Teach Us, see page 11

What Marine Mammals Teach Us, from page 10



Flagler appreciates all of your support – as do all of us at DRC!

and how they think. Whether in human care or in the wild, any

brings us closer together and can cause people to have more

behavioral study of dolphins is informed by what we know about their cognitive capacities. We strongly believe that this fascination helps the public connect to these amazing animals in which we have quite a few things in common, such as the ability to imitate. Having a commonality

empathy for marine mammals, which we have seen lead to conservation action on their behalf by guests of DRC.

Thank you for believing and supporting us in what we do. The impact of what we achieve together goes far beyond the lagoons of DRC or those of other facilities. These wonderful animals speak to us through their cooperation, interest and behavior, which helps us aid their millions of cousins in the wild that face so many threats, many of which we can work to prevent.

-Hannah Salomons/Kirsten Donald

JAX-4-JAX - A Survivor's Tale

The city of Jacksonville hasn't forgotten their adopted young dolphin, Jax. On October 9th they celebrated his success at a fund raising event held at the Upper West Club at EverBank Field, home of the Jacksonville Jaguars. It was a wonderful gathering of more than 100 guests and featured a presentation by DRC's Senior Trainer Jamie Stevens.

The festivities included great food, music, and an auction of donated items to help raise money for Jax's continued care. Everyone enjoyed pictures, presentations and updates on his progress.

Many thanks to our Board of Directors Chairperson Joanne Zimmerman, DRC Board Member Rhoda Stevenson and all those who volunteered to organize the event and to the people of Jacksonville who still care for their Jax!



Jax flips with joy over your ongoing support!

-Sandy Dennison

GO GREEN

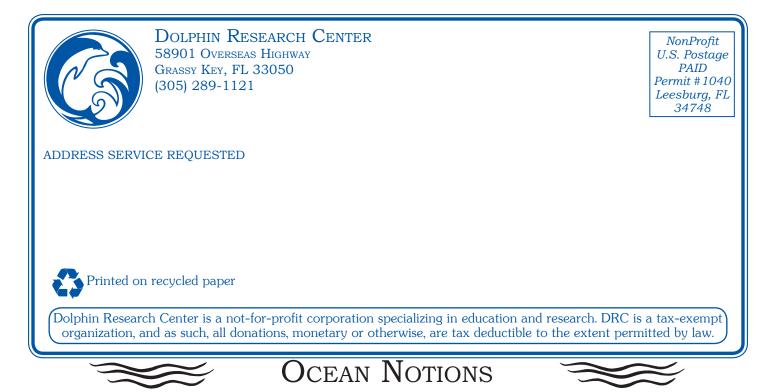
DRC is continually looking for ways to conserve the environment and "go green". Reducing the consumption and transportation of paper can make a big impact. Having your Dolphin Society and Gray Cross Newsletters delivered electronically or through our website can save paper and wood, reduce greenhouse gas emissions and save the ever increasing cost of ink and postage.

Please let us know how you feel:

- Would you prefer an electronic PDF color version of our newsletter rather than through the mail?
- Would you prefer an email reminder that the new newsletter is now available on our website?
- No thanks, I want the hard copy.

Please email us at drc-mbr@dolphins.org and tell us your preference.

Thank you for your important feedback, it will help our mission of conservation.



Here at Dolphin Research Center, we love to make sure the dolphins are having a lot of fun! The dolphins play with different trainers and guests every day. We keep things fun through enrichment. New toys and games teach us what the dolphins like. This makes us better friends. Playtime happens during programs with guests, with enrichment using ice, and even with new 'dolphin-safe' toys.

Every dolphin likes a different toy. Molly loves silk scarves and likes to swim with them on her flippers. Target poles and hula-hoops excite Calusa and Pandora; they will take guests on dorsal pulls with these under their flippers! The younger dolphins love chasing leaves and seagrass to bring to staff during dock time. Each day we learn more about the dolphin family!

Toys and games are a great way to enrich the lives of our pets too. The next time you visit Dolphin Research Center; see if you can take any ideas home for your pets. Do you have your own great enrichment idea? Tell us! We would love to hear your ideas.

-Karly Harding

Show these toys to your pets at home and see which one they like best:

