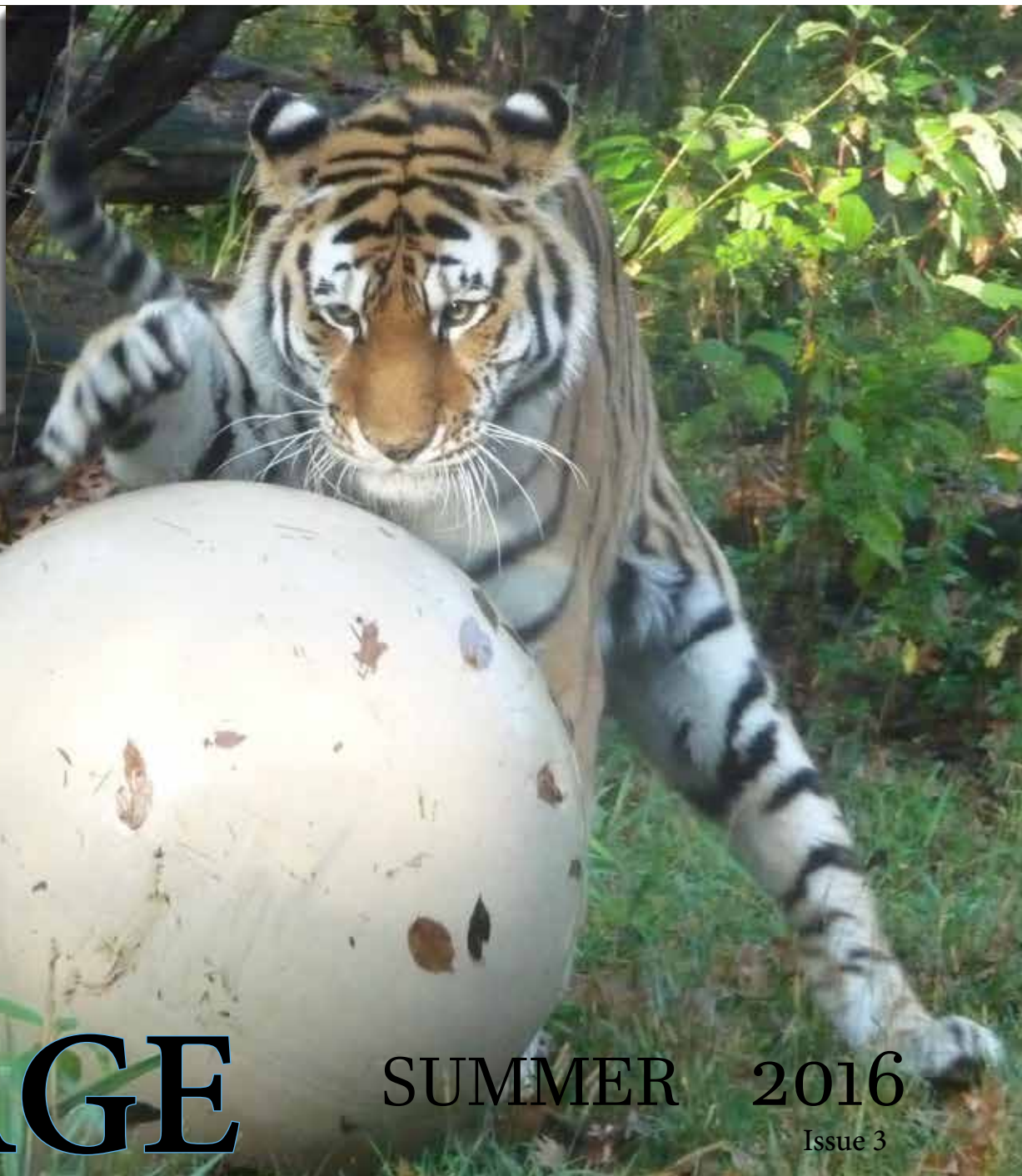




The Animal Behavior Management Alliance.



ENGAGE

SUMMER 2016

Issue 3



Letter from the President

As president, I have been spending time recently thinking about what the ABMA means to me and what I want to accomplish during my tenure as president. Why do I choose to dedicate a portion of my limited time to ABMA leadership and two additional committees when I am working, like so many of us do, to strike a balance between work and family life? I realized that it is because I want to be a part of an organization that supports the amazing group of people I get to meet through conferences and facility visits. I want to be in the same class of people that are making a difference to the animals in their care, and I want to be a part of the conservation message that goes out to all of the visitors impacted by seeing those animals. In an age in which everyone is scrutinized for every choice they make, I feel more passionately than ever about what I do. I truly believe that zoos are the conservation centers of the world. We are inspiring people every day to go make a positive impact. We are raising awareness of conservation issues, being part of breeding programs, raising money for field work and habitat protection. We are changing the lives of the thousands of domestics in our homes by adding to the growing trend of more positive reinforcement and less punishment based systems. I deeply believe that by bringing passionate, dedicated animal professionals together we can be a strong voice impacting the world in positive ways. That is why I chose to join ABMA originally, and why I continue to serve ABMA in any way I can. I encourage everyone to share some of the incredible work you do by submitting an article to Engage. The conferences are a great way to reenergize yourself and network, but it doesn't have to stop there. Consider taking advantage of what CollaborNation has to offer. Join a committee. Help us keep up with current affairs that are animal related. This is a volunteer based organization and it continues to grow thanks to the members who put themselves into it.

We all need to believe in ourselves but we also need others to believe in us too. By being a united voice we can be heard.

Cathy Schlott

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ABMA DISCLAIMER

One of the core values of the ABMA states that:

1. The sharing of knowledge and new ideas is fundamental to advancing animal behavior management.

We do this in many ways, such as through our conferences, publications, and social media. Our written publications feature many fascinating and thought-provoking papers and articles. Some you may agree with, others may challenge your perceptions and ideas. And while the content that you read reflects the views of the author and does not necessarily represent the feelings of the ABMA or the board of directors, we think that the diversity of subjects and viewpoints represented by our members, at our conferences, in our publications, and via our social media outlets is one of the strengths of this organization. We encourage you to take in all that you read with an open mind, because you might be surprised by what you learn.

Thank you and enjoy the publication!

2016 EVENT CALENDAR

September 7-11, 2016

AZA National Conference

San Diego, CA

Hosted by San Diego Zoo Global and SeaWorld San Diego

For more information go to: aza.org/annualconference/

September 19-23, 2016

AAZK Annual Conference

Creating Harmony with Wildlife

Hosted by Memphis Zoo

For more information go to: www.memphiszoo.org/aazk-conference

September 25-30, 2016

AZA Professional Training Courses

Animal Training Applications in Zoo & Aquarium Settings

Animal Training Applications provides zoo and aquarium staff with a background in training theory and an understanding of the skills necessary to train animals. It includes a historical perspective of animal training as well as terminology and an overview of training techniques. Selected training concepts and skills will be taught via animal demonstrations, group activities and individual skill development opportunities.

Managing Animal Enrichment & Training Programs

Managing Animal Enrichment and Training Programs provides students with the tools and skills needed to set up and manage a successful enrichment and training program that meets AZA accreditation standards.

While some time will be spent on the concepts of training and enrichment, this course is not a workshop to develop enrichment ideas or learn animal training skills. This course focuses on developing the components of a successful program and learning the leadership skills needed to successfully implement that program.

Denver, CO

Hosted by Denver Zoo

For more information go to: www.aza.org/ATA.aspx or www.aza.org/MAETP.aspx

October 25-28, 2016

AZA Professional Training Courses: Principles of Elephant Management II

Principles of Elephant Management II focuses on the skills necessary to safely accomplish all of the AZA-required elephant behavioral components. Live training demonstrations and hands-on experiences will be utilized to combine the teaching of advanced elephant principles with best occupational safety practices. To provide students with the most valuable hands-on and personalized experience, enrollment in this course is limited to 12 participants.

Houston, TX

Hosted by Houston Zoo

For more information go to: www.aza.org/PEMII.aspx

Nov. 13 – Nov. 18, 2016

IMATA Annual Conference

Educating Today, Conserving Tomorrow

San Diego, California

For more information go to: sandiego2016.imata.org

November 14-19, 2016

AZA Professional Training Courses: Program Animal Management

This course is designed for program animal managers and coordinators; education staff who utilize program animals; program animal and interpretive keepers; and museum professionals who handle live animals.

St. Louis, MO

Hosted by Crowne Plaza Clayton

For more information go to: www.aza.org/ppam.aspx

A Members Insight of the Tampa Conference

“I still have my conference buzz going,” one of my coworkers said when we got back to work. It was true for me too. All of our idle chatter the week after ABMA went back to the presentations we had seen during the conference the week before. There’s something about a good conference that can’t be replaced by research and online communication. There’s nothing like people getting together and sharing not only information and lessons learned, but also their passion for what they do. There were plenty of “I’ve been there too!” and “We should totally do that!” moments. It’s a sensation that goes beyond the sum of its parts.

The theme that attracted a significant amount of attention around the middle of the week was that of stereotypic behaviors. Naturally this is a topic that can be a bit of a downer. It’s the kind of subject animal professionals may want to avoid. This is of course due to the generally accepted belief that stereotypic behaviors are undesirable, a belief that exists for many reasons. No one will debate that physically harmful stereotypic behaviors are a serious problem, but we also learned that “stereotypic” may be in the eye of the beholder. Sometimes stereotypic behaviors are actually that other s-word: superstitious, meaning that the keeper responsible for the animal is responsible for reinforcing the behavior accidentally. Something we might call a “did I do that?” moment. Indeed in many cases stereotypic or otherwise undesirable behaviors are inadvertently reinforced by caretakers, often when trying to get animals to stop. We can also happily conclude that stereotypic behaviors are frequently entirely unrelated to boredom. After all, a mentally well-stimulated *H. sapiens* is no less likely to become a fingernail biter. Even though the term stereotypic may turn out to be a wide umbrella term, there is a concrete and achievable method to unraveling the mystery called Functional Analysis. Publications on functional analysis are widely available, and it can take the guesswork out of identifying the motivations behind animals that present even the foggiest behavioral puzzles.

There were plenty of “feels” to go around as well, both good and bad, but following a similar theme: reintroduction to the wild. There was a beautiful story of restoring a species that had become extinct in a certain region, namely the Wood Bison (*Bison bison athabascaae*) to Alaska. The innovative techniques used by the team from the Alaska Wildlife Conservation Center and the Alaska Department of Fish and Game allowed them to bring this species back to a region from they had disappeared 100 years previously. The lack of a human relationship is generally considered critical to the success of any reintroduction program, and yet the animals had to be guided over land to reach their predetermined territory. Using snowmobiles and simple makeshift fencing, which the bison could have easily trampled if they had tried, the team was able to guide the animals through the Alaskan wilderness, to a home range in which they are still thriving at the present time.

The story of Keiko is one many animal professionals are familiar with. Surely many of us in the field view it as a testimony to a corrupt, fanatical philosophy which has nothing to do with reality. We are all dedicated to the improvement of animal care, we are sober about where we can improve, and we are all in favor of reintroducing animals back to the wild when appropriate. Even so, the idea of “release” at any cost, but only for cetaceans, is like a mental epidemic that won’t go away. Although it is worth noting that after Keiko’s death many activist organizations changed from touting unconditional reintroduction, to transferring animals to sea pens, the best new idea that our field has already been doing for decades. The story of Keiko is a hard reminder that passion and emotion must always go hand in hand with science and evidence. The war going on between animal caretakers and extremist activists is a false one, a civil war between people who love animals that can only cause us to lose more of them faster.

People who work with animals are notoriously busy, and tired as hell at the end of the day. Many of us have second jobs to sustain our passions. Even so, there is no one but us who has enough knowledge to counter the armchair extremists with what we know to be self-evident facts. Nobody in the public seems to be aware that NOAA has to approve the release of any marine mammal in the United States, and if a marine mammal is releasable, it legally has to be released. This is an idea that should give aquarium goers confidence. That’s to say nothing of endangered species. Without Species Survival Plans coordinated by our zoos, many species would already be extinct. This causes us to ask ourselves “What’s the issue here?” The issue is an uninformed public. Do all of us have the time or ability to make websites, memes, and YouTube videos to counter the propaganda tidal wave? Certainly not. But some of us can, and the rest should strive to do what we’re able for the people we can reach.

With so much to think about when caring for animals in a changing world, the support that a wider community brings is more essential than ever. The conversations I had while at the ABMA Conference are ones that I’ll always remember, not only for the ways they brought new perspective to my career and mission of improving animal lives and promoting conservation, but for the pure enjoyment I received from them. Seeing what others have done is always a reminder to me that knowledge is the path to every victory, and creativity is the solution to every problem.

John Widick
Marine Mammal Trainer
Clearwater Marine Aquarium



The ABMA is pleased to announce that we have created a new conservation award. There are two recipients this year of the \$1000 award that were announced at the 2016 Tampa conference.

Gerardo Martinez was awarded for his contributions to Asian elephants by introducing foot care and positive reinforcement techniques to local mahoots in Thailand.

Our second recipient is **Barbara Glatz**, for her work in Africa utilizing positive reinforcement techniques with local police service animals.

Each recipient presented at the 2015 Copenhagen conference, having a huge impact on the audience. Their work is inspiring and exciting- both implementing training programs that improved welfare for the animals involved. The ABMA looks forward to recognizing outstanding conservation work each year.

2016 Honors and Awards

Travel Scholarship Winner: This scholarship is awarded to an ABMA member whose institution is unable to give them financial support. The Travel Scholarship will help the award recipient by giving them the ability to present their work and it will help the organization by giving ABMA members the opportunity to hear presentations that the membership otherwise would not have the opportunity to hear and as such, the Travel Scholarship supports the ABMA Core Value of "Sharing the Knowledge".

Here and Now with Your Animal- Techniques to Improve the Mental Awareness of Trainers and So Enable More Effective Training
František Šusta and Petra Jaškóvová; www.trainingdialogue.com

Behavioral Management Achievement Award: Recognizes an outstanding achievement in the application of behavior management techniques.

A Challenging Past With a Promising Future: Successful Management of African Great White Pelicans Through the Use of Operant Conditioning
Tiffany Burns, Heather Statz, and Brooke Bowersox; Clearwater Marine Aquarium

Behavioral Management Innovation Award: Recognizes outstanding application of novel, unusual or original behavior management technique.

A Key to The Misunderstood Relationship Building With An Age -Old Predator
Nelly Rivera; Theater of the Sea

Animal Welfare Advancement Award: Recognizes achievements that enhance animal welfare through specific environmental enrichment/conditioning techniques or programs.

When Enrichment Isn't Helping: The Importance of Identifying the Function of Stereotypic Behaviors before Attempting to Modify Them
Sandy McPadden; The Buzz on Enrichment

Sharing the Knowledge Award: Recognizes achievements in behavior management education to enhance the knowledge of professionals and/or the public to the benefit of animals in human care.

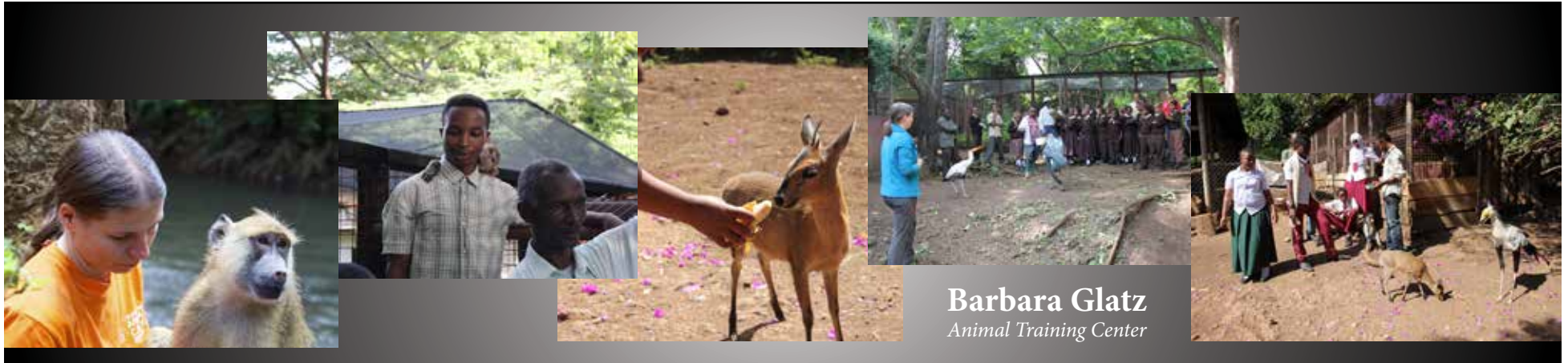
Changing a Perception: Improving Animal Welfare in Vietnam.
Erin Ivory and Georgina Allen; Wild Welfare

Poster Presentation Award: Recognizes the best poster that represents an achievement in any of the above categories in this format.

Paw Crate Pedicures with Amur Tigers
Celess Zinda; Oregon Zoo

Impact award: This award is chosen by all delegates at the end of the last formal presentation. Delegates may cast a vote for any paper, poster, or activity that they feel deserves special recognition.

Killing Keiko: A Cautionary Tale of One Whale
Mark Simmons



Barbara Glatz
Animal Training Center

Conservation Through Positive Reinforcement Training - a successful approach in Tanzania

The Animal Training Center is a very unique institution in Austria, which offers several services around animal training. They do dog behavior counseling, train Diabetic Alert Dogs, offer seminars, advice zoos on setting-up training programs, train animals for special occasions like TV-Shows or photo shootings and are involved with schools and other institutions to educate students and adults about wildlife, conservation and correct keeping of animals. As this part has always been their passion, they started a cooperation with an NGO in Tanzania, the Kilimanjaro Animal Center for Rescue, Education and Wildlife (Kilimanjaro Animal C.R.E.W.) as they share the common goal of educating people about animals and wildlife in general and how to protect them.

The Kilimanjaro Animal C.R.E.W. is located at Makoa-Farm on the slopes of Mt. Kilimanjaro and is run by two German vets. Next to organizing horse back riding safaris into the bush they have a small private sanctuary, where they rehabilitate and release animals back into the wild again. For some animals however this is not possible out of different reasons. These animals stay on the farm and the team gives them the best care possible and uses them as ambassadors for their wildlife education programs.

Tanzania is politically very calm, the different tribes and religions live more or less peacefully with each other. However, there are many natural believes, which affect people's everyday lives. Those believes create myths about animals, which can become a threat to them. For example, people believe that owls are a bad omen – they think that if they see or hear an owl, someone close to them will die. Out of this reason whenever people encounter and owl they will try to kill it. Tanzanians don't believe that animals have feelings, they don't know that they can feel fear or pain and because of that they don't care about how they handle animals or also how they kill them. Consequently being cruel to an animal happens out of a lack of knowledge and not because people want to torture them.

That's why the C.R.E.W. started many different local projects to educate people. They started with a forest kindergarten for the youngest amongst them. Children between 3 and 5 years have the possibility to learn in and from nature, they meet the animals of the sanctuary and learn from this very young age on to respect wildlife and can build up a passion for it. For students of schools and also for NGOs they set up a Bush School program, which focuses on human-wildlife conflicts and how to avoid them and on the correct keeping and handling of animals in human care. Many African countries have Bush Schools, in Tanzania however, this one is the first of its kind. Additionally to using lectures and activities to educate the students, animal training through positive reinforcement methods is used to teach compassion to the students. During such training sessions they learn to see animals through different eyes. They experience that they get feedback from the animal, that the animal wants to cooperate with them and also they realize that every animal has a specific character. With the help of these training sessions it is possible to prove certain myths as being wrong, the students can watch natural and species-specific behavior and can again build up passion for the animals. Next to teaching children and teenagers, the C.R.E.W. also offers training for adults, for example teachers who themselves do not know about wildlife and conservation although they are supposed to teach it.

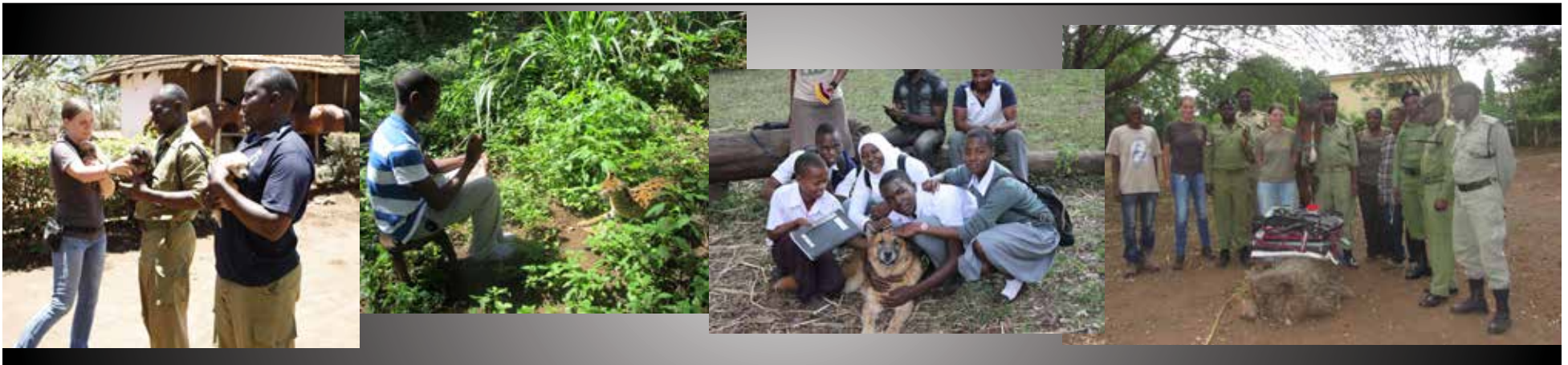
A completely different project was started about two years ago with the Police Academy of Moshi. Horses and Dogs are bred and trained there, but the staff is not really educated about how to do that properly. The C.R.E.W. was called there because a bad accident had happened with a horse and they needed help in dealing with it. The C.R.E.W. could help the horse but was shocked by the condition the animals were in. The first horses of the police arrived from Australia in 1958, and all the knowledge about keeping and training and also all the equipment come from that time. Little surprising that the horses were scared due to the punishment based training methods and had injuries all over their bodies from wearing this old and broken equipment. Additionally they were starved and without constant water access in the African heat. It took a lot to convince the police trainers that the training they are doing is very inefficient and leads to scared and non-suitable police horses but they finally agreed to cooperate with the C.R.E.W. Also the dog trainers realized that their training is very inefficient and outdated and joined the cooperation as well.

A holistic program was set up, including not only training methods themselves but also keeping and caring for the animals. Used but still suitable equipment was collected from supporters in Germany and Austria and the members of the C.R.E.W. visit the academy on a regular basis to make sure that the animals' basic needs are fulfilled.

The actual training program is very comprehensive. Starting out with training chickens to teach the police trainers the first basics about learning behavior and the use of positive reinforcement methods, they continued with training the horses from the C.R.E.W. and getting riding lessons on them. Only afterwards the C.R.E.W. advised them on training their own police animals, horses and dogs. These training sessions are still alternated with occasional sessions in between with the animals of the C.R.E.W. The enthusiasm and the interest the police trainers show during training are very motivating and make every session a joy.

All the work the C.R.E.W. is doing is non-profit and they depend on donations and sponsors.

If you would like to support their work or want to learn more about it, please visit them on Facebook: www.facebook.com/kilimanjaroanimalcrew or get directly in touch with them and send them an email: office@kilimanjaroanimalcrew.org





Turning Inspiration Into Action

Courtney Macklin
Disney's Animal Kingdom®



Anyone who has chosen a career in animal care or training knows that sitting down listening to presentations for hours on end is not how we would choose to spend a day, let alone the better part of a week. The ABMA conference however, makes it well worth it. To learn from professional trainers who have been in the business for decades alongside those who are just starting out and innovating animal care is truly an invaluable experience. Every presentation I watched reinforced the idea that animal care is advancing at an incredible pace as training continues to overtake manual restraint and enrichment encourages natural behaviors. It is clear that individuals in our profession are here because they are passionate about animals and conservation. I believe that the impact zoos and aquariums have on their visitors is greatest when we exhibit animals in natural environments displaying species appropriate behaviors. This conference demonstrated to me that while habitats are becoming more realistic, both enrichment and training are taking on more natural forms as well and helping us accomplish this goal. Even public demonstrations are showcasing natural behaviors and are focusing more on educating through entertainment.

Another important emphasis of the conference to me was how we are learning that the keeper's relationship to the animal is paramount when it comes to training. The conference theme of "Breaking Down Barriers" really came through when things that normally wouldn't seem possible were accomplished when trainers believed in their animals as well as themselves. They proved that it's possible to build a relationship with even the most unlikely species and showed the results of what that relationship can lead to.

One presentation in particular that really struck a chord with me and quite literally brought me to tears was the reintroduction of wood bison to the Alaska wild. They used training to return an animal to its natural environment for the first time in over 100 years. To me, that is truly amazing! Along the same lines I was equally impressed by the fact that training and enrichment are being utilized to help rescued elephants and other animals in Vietnam. Overcoming cultural and language barriers to improve animal welfare is truly and impressive feat.

I know I am not alone in my reaction to Mark Simmons' talk on his book Killing Keiko. The story details the release of the whale that the movie Free Willy was based on. It was both informative and powerful leaving me with feelings of both hope and frustration. I felt hopeful because the future of animals is in our hands and we have the power to advocate for their future. The frustration came in to play when I realized that I wasn't sure what "I" specifically could do to help which also led me to wonder if I was doing enough. Now, more than ever, we need to stand together to show the world how zoos and aquariums are contributing to conservation and inspiring future generations to take a stand in preserving the amazing creatures we share the planet with. I left the conference not only motivated to change the world but to do whatever I can to improve the lives of the animals in my care while they empower future generations to save "the wild" so someday their descendants might return there.

In addition to changing the world, I also left the conference inspired to train our pod of pink-backed pelicans. So I guess we will see which happens first!

“Improving Welfare by Shifting Management - using auditory recall to manage a mixed species aviary”

Annette Pedersen & Henrik Futtrup (hef@zoo.dk)



Annette Pedersen, Cph. Zoo

In 2011 Copenhagen Zoo opened a 1500 m² “walk-through” aviary for South American birds. The aviary was built to create a close-up experience for our guests, and a more enriching environment for the birds. The aviary houses six species of birds: Caribbean flamingo, black-necked stilt, Inca tern, ringed teal, Chiloé wigeon & scarlet ibis – all water birds, but very different in looks and behavior. The benefit of having more species in the same exhibit is that it always creates a lot of activity and life... but it also creates a lot of challenges!

Food

They all live off – or like – almost the same food, which makes food management a difficult task. We had to make the food less attractive or less accessible for other birds, than the ones it was meant for; like blending the ibis food to make it less attractive to the terns, and put a net on top of the stilts food bowls to make it inaccessible for the ducks.

Breeding

Some of the birds breed in the same kind of nesting areas, creating a lot of territorial competition. The ducks have their nesting boxes on the wall of the indoor areas, which the terns find very interesting too. So there have to be plenty of nesting boxes in the Inca tern indoor area to make sure, that they are not forced to move out and maybe invade the duck indoor area. Even though the stilts are very protective parents, stilt chicks are a nice snack for an ibis, making the need for a lot of hiding places for stilt chicks an important part of the environment.



Michael Petersen, Cph. Zoo

Climate

Having water birds outside in a zoo where winters can be cold and temperatures often get below 0°C (32°F) means, that there also have to be inside areas for each of the species. Whenever the temperature gets below freezing the birds HAVE to go inside to prevent frost damages in their feet... but how? Every fall, around the 15th of October, when night frost could occur, we used to gather a group of app. 6-8 keepers – and sometimes the veterinarian – and with nets, to go and catch all the birds that had to be inside for the winter. It was extremely time consuming, stressful and a big risk of injuries for both birds and people, and not the best welfare for the birds to be locked inside for sometimes more than 4 months in a year! But how could we change that? By training the birds to shift!



Ibis and Inca tern stalls Annette Pedersen, Cph. Zoo



Mette Melgaard Hedegaard feeding the pelicans inside.
Annette Pedersen, Cph. Zoo



Henrik Futtrup feeding the Inca terns
Frank Rønsholt

Training

All the birds have to shift to their own indoor area, through their specific hatch in the two floor building, which housed all the aviary birds during the winter. Our goal was to be able to call the birds to their own indoor area, and decided that by using a specific sound for each of the species, we would be able to communicate a clear signal to the birds, who we wanted to go inside and when.

Before the training began, we made sure, that the area around the hatches was as attractive as possible to the species, that we wanted to go through the specific hatch, and to make it as likely as possible that the birds would already be near by the hatch, ex by placing their outside nests close by.

We decided to work with one species at the time, starting with the Inca terns, teaching them to come by the sound of whistle. The training plan was pretty simple:

1. Classical conditioning the terns to the sound of the whistle, by entering in the aviary, blow the whistle and start throwing fish – sand eels – in the pond. The terns quickly flew down to get the fish.
2. Switching to operant conditioning by blowing the whistle, watch for the birds to start flying, and then begin throwing the fish.
3. Over time the terns started to come closer and closer, grasping the fish in the air, and finally taking the fish from the keepers' hand.
4. The keeper began hand feeding the birds closer and closer to the hatch, where the birds were supposed to go through.
5. Finally the whistling was done from inside and by throwing a few fish through the hatch a couple of times, the terns quickly learned, where the food was coming from.
6. When all the birds were coming inside, the next step would be to close the hatch behind them:

When all the birds were inside, we began closing the hatch, we reinforced a lot – if the birds showed signs of wanting to get out, we opened the hatch. Over time the birds got used to the closing and opening of the hatch and did no longer react to it. The Inca terns had learned to shift.

The following birds were taught the same way, just using other sounds like: a bell, a putty knife knocking on a metal shelf, clapping hands three times, a plastic bottle filled with pebbles.

For the training sessions we used the birds' preferred food items, which, for some, would be their daily food rations, and for others, preferred supplements like mealworms. In those cases where we used their daily diets, we always feed the rest of the food by the end of the day. Their food rations are evaluated regularly according to their appetite to prevent food waste or empty bowls. We performed 2-12 training sessions a day depending on appetite, time of year, breeding season, etc...

Training challenges

But what if the “wrong” birds show up, when giving the call? To prevent the likelihood of that, we begin the shifting by letting in the most “motivated group of birds” come in first, which are often the Inca terns. Then the next-most motivated ones and so on...

If we are only shifting ex. the stilts, and the Inca terns starts to show up and create confusion, we simply stop the training for now, throw a few mealworms in front of the stilts that are already inside; making sure that we do not unintentionally reinforce the Inca terns for coming inside too! We will come back later and try again, when the Inca terns are busy doing something else.

Purpose and Application of the Least Reinforcing Scenario (LRS)

Angi Millwood & Thad Lacinak

Precision Behavior

www.precisionbehavior.com

Definition

The least reinforcing scenario (LRS) is an effective yet frequently misunderstood training strategy for reducing aggression in animals. When conditioned correctly, it communicates to the animal, “that was incorrect, but if you return to me and remain calm and attentive, there is a chance you will still receive reinforcement.” In essence, it teaches the animal not to worry about failure and keeps the trainer focused on seeking calm attentive responses from the animals in their care.

History

It was developed in the 1980s and published in the early 1990s (Scarpuzzi, Lacinak, Turner, Tompkins, Force, 1991) by a few senior-level killer whale trainers at SeaWorld as a way to reduce frustration (which can lead to aggression) in the whales when the animals completed a behavior incorrectly. It was originally named the least reinforcing stimulus, but after some review from noted behavioral psychologist, Dr. Stan Kuczaj, “stimulus” was corrected to “scenario,” as the LRS is more of a process than a singular stimulus.

Since its inception, it has been used with a wide variety of animals to impressive success in zoos, aquariums and with domestic animals. The biggest obstacle has been correct dissemination of the purpose and application of the technique. The result is that the LRS is used incorrectly in many facilities and therefore, doesn't produce the desired results. As most experienced trainers are aware, any poorly used behavior modification strategy can lead to confusion, which can lead to frustration, which can lead to aggression.

Correct Application

Here's how the LRS really works (also see LRS graphic breakdown below):

- I. The trainer gives the animal an SD (discriminative stimulus) or cue for a particular behavior.
- II. The animal does the behavior incorrectly, refuses to do the behavior, or does not perform the behavior to full criteria.
- III. The trainer does not bridge the animal.
- IV. If the animal is already in front of the trainer, the trainer pauses for approximately three seconds. If the animal is at a distance from the trainer, the trainer waits until the animal returns, then applies the three second pause. It is important to note here that the pause that the trainer gives is not a hard stare or stiff stance. The trainer simply pauses in the same posture that she was in when she gave the cue. If she was kneeling, she remains kneeling. If she was standing, she remains standing. What she doesn't do is turn her back, become stiff or stare at the animal to communicate, “that was wrong.” There's no need. This doesn't mean that the trainer ignores the animal. It is perfectly acceptable for the trainer to look at their animal as long as they remain relaxed. This three seconds is the opportunity for the trainer to assess the animal's attitude.
- V. After the three second pause, IF the animal looks attentive and ready to take the next cue and IF the animal returned to the trainer quickly after not hearing the bridge (in the same amount of time that the animal would have taken to return had he heard the bridge), the trainer must, on occasion, reinforce this good cooperative attitude. If the trainer is not occasionally reinforcing the animal's calm behavior after the three second pause, the trainer is not using an LRS!
- A. The reinforcer can be anything the trainer would normally use. She can use her bridge. She can give the animal food. She can give the animal attention or tactile stimulation.
- B. This is where trainers go wrong. Most trainers think the LRS is just the three second pause. It's not. The LRS is a scenario. It is a process. And reinforcing the good attitude after the incorrect behavior, on occasion, is the most important part.
- VI. Then the trainer continues with the session as normal.

Practical Application in a Zoo Setting

To better illustrate, consider these scenarios of proper use of the LRS during a gorilla training session.

Gorilla Blood Sleeve Conditioning with Use of the LRS: Scenario A

- I. The trainer asks the gorilla to grasp the bolt at the end of a blood collection sleeve.
- II. The gorilla grunts and hits the enclosure mesh with the back of her hand.
- III. The gorilla looks at the trainer, remaining in the same position/ location.
- IV. The trainer pauses for three seconds. During this time, the gorilla continues to look at the trainer in an attentive manner and appears ready to take the next SD.
- V. The trainer bridges the gorilla and squirts diluted mango juice into her mouth OR the trainer asks the gorilla to grasp the bolt at the end of the blood collection sleeve again OR the trainer bridges the gorilla then asks the gorilla to retrieve a toy OR ... you get the idea.
- VI. The session continues as normal from there.

Gorilla Blood Sleeve Conditioning with Use of the LRS: Scenario B

- I. The trainer asks the gorilla to grasp the bolt at the end of a blood collection sleeve.
- II. The gorilla grunts and hits the enclosure mesh with the back of her hand.
- III. The gorilla looks at the trainer, remaining in the same position/ location.
- IV. The trainer pauses for three seconds. During this time, the gorilla throws a toy that is within reach across the enclosure.
- V. The trainer cannot reinforce the throwing of the toy as this is an undesirable behavior. At this point, the trainer must make a decision based on her knowledge of the animal. She can either end the session and return later or she can give another three second pause (in effect beginning another LRS process). If the animal then displays an attentive relaxed response, the trainer can reinforce that behavior or move on with the session.

Approximating the LRS

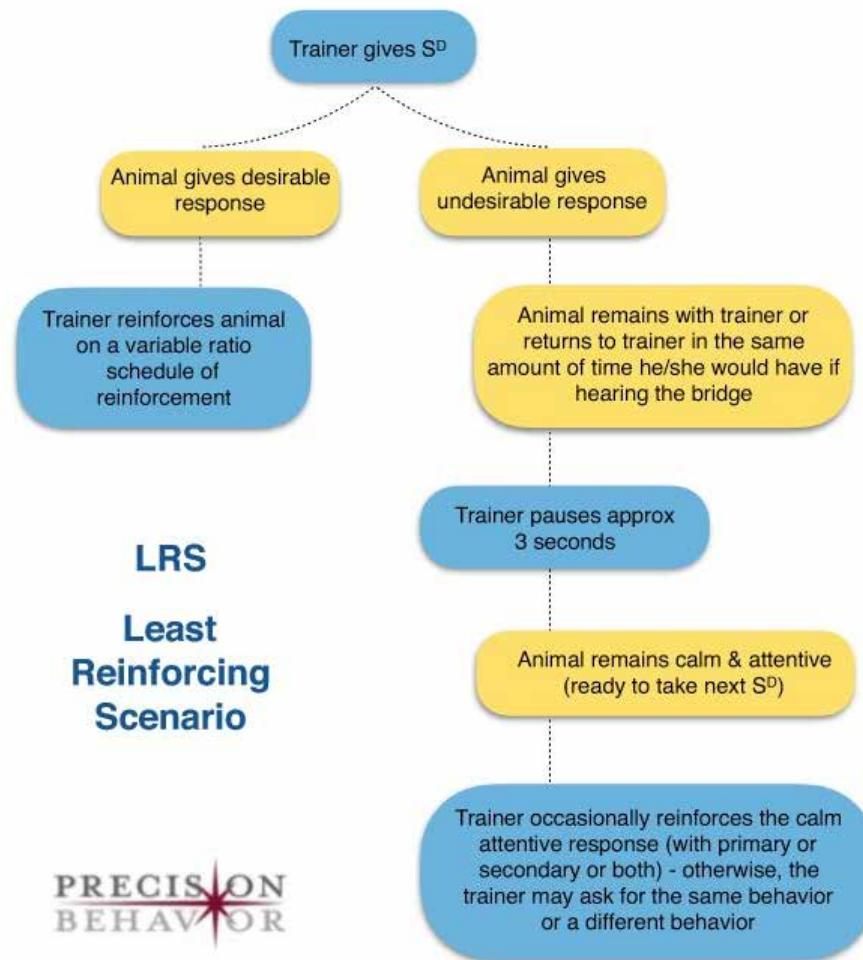
It is important to note that if the LRS is a new concept for an animal then it must be approximated. As with any new behavior, the calm response from the animal after not receiving a bridge and receiving a three second pause will be reinforced heavier in the beginning so that the animal learns the concept then frequently then occasionally. The key is to reinforce it often enough that the animal will choose to remain calm after an incorrect behavior to potentially earn a reinforcer but not so frequently that the incorrect behavior itself is reinforced.

Benefits

When used correctly and consistently, the LRS can improve behavioral programs. It provides an alternative to over-used time-outs and provides the trainers with a clear protocol of how to handle incorrect behavior in the most positive (yet least reinforcing) manner possible.

REFERENCE:

Scarpuzzi, M., Lacinak, T., Turner, T., Tompkins, C., Force, D. (1991). Decreasing the Frequency of Behavior through Extinction: An Application for the Training of Marine Mammals. in proceedings of the International Marine Animal Trainers Association.



When Training Runs Through Your Veins

Scott Trauger

Animal Trainer

Natural Encounters, Inc.

In my job, it is often asked, “How did you get to do what you do? What did you do to get this job?” The unique thing about our field is that we know there is no one right way to succeed or to get into the field. The generic answer is to study a biological field or psychology and then get experience through internships (often unpaid). Eventually, you might get a job in a smaller zoo and then, down the road, land your dream job. However, this is not always the path that leads to success.

Would I state or follow the advice above if I was just starting out in college with an intent to pursue an animal training based position-absolutely! The thing is, life often happens and that gives us unique perspectives and experiences that lead us to our careers. If I told you that I knew a person with a television production degree that was extremely passionate about animal training and wished to pursue a job in a field where he felt that he would be able to impact the animals and people’s lives with which he worked, most people would probably read that on a resume and say it’s someone who has their heart in the right place, but we can probably find a better candidate for our position. The thing is, the person I just described above is myself. I have been in the field for over 10 years and still love the excitement I get every time we have a success or breakthrough with an animal, no matter how large or small. I will admit, I’m fortunate to have been in the right place at the right time several times in my career, but it is what we do with our opportunities that will define us, not what is written on paper.

For most of my career, I have been able to work with every variety of bird. In my first three animal positions, I would say they were heavily focused on birds. This is ironic, as I always had a passion for working with mammals, but it just so happened that I had the opportunity to work around the birds and I became really good at understanding their behaviors. I loved every chance I got to train, and birds, especially flighted ones, are probably some of the most challenging animals out there (as they have the ability to leave a training session like no other-they can just fly away after all!). Even after 8 years working with mostly birds, I had the itch to try my training skills on some of the larger animals-partly to see if I could translate my skillset, partly to work the mammals I hadn’t been able to focus on to a larger extent to that point in my career.

In September of 2014, I was tasked with leading up the training of the African Hoofstock at Tampa’s Lowry Park Zoo. The team that was in place was already excelling at the husbandry aspects of the animal care field. On top of that, several of the team already had shown an interest in the training aspects of the animal welfare perspective. It was through this opportunity that I was able to truly put my animal training skills (and people skills, as well) to the test. After talking with the area Supervisor and Curator, it was determined to focus on several animals, but not the entire collection. Point people were chosen to lead up the training of individual animals and the role I played was more of a consultant of the sessions and training plans for those leading the sessions. I did have several animals that I would lead up, too. One of them was the okapi, which you can read about in the 2016 proceedings from the Annual Conference in Tampa. The other major animal was the giraffe. They had been attempting to get a blood draw from any of the giraffe (there were 4.0 of three different species), but the training sessions would always stall out before being able to achieve a successful draw.

In most of my past behaviors, I had the opportunity to start from scratch where I could draw up my own training plans and build my relationships without precursors or histories already established. These animals, however, had a history of being squeezed in a chute or restriction device, in the past (a common method of restraint for Hoofstock prior to animal training theories that are now much more prevalent in zoos). This would truly be a unique experience. I quickly found that relationships could be easy to build due to already knowing what primary reinforcers each giraffe would prefer. The challenge for me was that I was now working an animal that always would have reserves in its stomach regardless of what was being offered. What this meant is, if you offer a bird a grape, and it only gets a grape for a really good behavior, it almost always will take the grape. With a giraffe, if you apply the same concept, but with a carrot or sweet potato, sometimes they will take it, and other days could care less. This forced me to focus on multiple sessions a day and many repetitions over the course of many days to make any progress.

I am happy to say that persistence paid off. By relying on the skillset that I had learned over the years from many great mentors, we were able to successfully draw blood with absolutely zero reaction from one of our giraffes, a Masai named Jyoti. This, to this day, has been one of the high points of my career. If I ever need a pick me up if I'm having a rough day, I can think of that positive moment and remember exactly why I love doing what I do. I truly believe that an entire team of people led up to that moment-the trainers who had been working with the giraffe before I arrived, the leadership with their guidance, and the support of my co-workers during the training.

I like to say that everything happens for a reason. I am now back working with the birds that I have worked with for most of my professional career. I know that when we train, we often will use behavioral momentum to achieve success with harder behaviors. I have realized that this same concept we often use with our animals applies to our lives, as well. If we always strive to trend upward with all we do as trainers, caretakers, keepers, etc...our field will continue to trend in the direction that will lead to the truest and best care for all of the animals in our care. We all have unique paths that led us to where we are and we should use that to our advantage. We live in a time where we face much pushback from a variety of places and the best we can do to combat it is to stick together and show them what the optimum care of animals looks like. Training of our animals will play a huge role in this movement and each of us owe it to our animals to give them this ultimate level of care. This is why it is so important to be active in an organization like ABMA. Never settle for status quo. Always see what is new and innovative and together, we can prove to everyone why our profession exists.



BIRTH ANNOUNCEMENTS

Moody Gardens

Female Prehensile Tail Porcupine
born 6/26/16

2 Male and 1 Female Rodrigues Bats
born 5/15/16, 6/14/16, 7/15/16

