



President's Message

By: Sandy Flynn, President

Greetings Docents,

Spring is only 6 weeks away!!! At least that's what I'm telling myself. Enough already of cold and wind!!

We had some very good numbers for Electric Safari. In fact, the best ever attendance. Thirty nine thousand guests came through the zoo for Electric Safari. Our best weekend was the first weekend with 7,343 guests. And one night alone the guests numbered 3,265. Thank you to all who braved the weather and worked this great event.

We also had a 5% increase in total attendance for the zoo in 2016 with 776,044 total guests. And off season was better than ever with a total of 232,784 guests. We are very fortunate to have been given the opportunity to contribute to the zoo's overall success!!

Meet your Board of Directors

This month I'm featuring Becky Poole. Becky is currently 2nd Vice President and in this role she is in charge of tours and safaris. Becky has been a docent since 1999. She became a docent after her retirement. She wanted something to keep her busy and knew she wanted to become a docent either at the Fine Arts Center or Cheyenne Mountain Zoo. She made the right choice and we are very fortunate to have her as part of our group.

She says the animals are terrific and working as a docent is always challenging. She likes the fact that she is always learning new things when she's at the zoo.

She has many favorite animals – giraffes, elephants, lions and hornbills. When she started at the zoo her favorite thing to do was giving a tour or safari. Now she loves Zoopeteers and spending time in The Loft.

She's seen a lot of changes since she became a docent. Everything stayed pretty much the same until ARV was built. That was a major change and then Encounter Africa.

She's held many board positions including president, 1st Vice President, 2nd Vice President, Safari coordinator, Special events coordinator and Zoopeteer manager.

Her family has always been involved with the zoo. She says it's been a really important part of their lives.

An Interview with a Zookeeper

Rebecca Zwicker is the Lead Keeper in Rocky Mountain Wild and she is sharing some of her experiences with us as a keeper.

What was the driving force behind your career as a zookeeper?

“From an early age I always found the natural world fascinating and animals in particular. I worked after high school in various retail positions, trying to decide what I wanted to go to college for. As life goes I got sucked into the world of retail and before I knew it years had flown by but I knew retail was not my passion. I got serious about school and knew that nature and animals were my passion. I enrolled in the Zookeeping program at Pikes Peak Community

College and after two semesters and an internship I was hooked.”

How did your journey lead you to Cheyenne Mountain Zoo?

“I had visited our Zoo many times growing up. My family is in the Springs and I really enjoy living in Colorado. I did two internships at CMZ and really loved it. It was after my second internship in primate world that a position opened in ARV and I was given the opportunity as a keeper.”

How long have you been with CMZ and a keeper in RMW?

“I was hired for ARV on December 7, 2003. My first day I cleaned giraffe stalls and couldn’t have been happier!! I learned that while I was thrilled to work with all species, my true passion was in primates. I mentioned this in my interview and about a month or two later a position opened in Monkey Pavilion. Before I knew it I was primary MP keeper and a relief keeper in Primate World. This was the dream job I had hoped for. I spent a little over 5 years in MP. I was also responsible for the African Lions and the Asiatic and Andean bears. While I always loved the primates, the bears started making a big impression on me and soon moved to the top of my list. When an opportunity came to work with our two grizzly boys, Emmett and Digger, I jumped on it!! I became the RMW lead keeper in 2009 and have never looked back. I’m for sure in my happy “wild” place.”

What is a typical day in the life of a keeper?

“A keeper does not really have a “typical” day very often. It’s what I love about the field. Sure, we have our routine but the animals alone keep things interesting and you never know what quite to expect. Many times, I am faced with a day I never would have predicted. Any given day there can be a medical procedure or event that requires our assistance. We do a lot of behind the scenes tours and defining moments. Training brings its own surprises and even the weather makes a huge impact on our day.”

What are your greatest challenges?

“Keepers are passionate and dedicated people. We fall in love with the animals in our care and want nothing but the best for them. We stay professional but take this job very personally. I know that at some point either I or the animals I care for will leave each other. This makes for difficult and emotional days. Also, we have an obligation to the wild counterparts in our collection by doing our daily due diligence in inspiring guests to help us in preserving this planet. I feel a sense of urgency regarding conservation and deeply hope we can turn the tide.”

How can docents be more helpful to you?

“My RMW co-workers and I are thankful for all that docents do for our area. We appreciate the enrichment items donated and the folks who man stations in our area armed with bio-facts and smiles. Please don’t hesitate to use us as a resource and pick our brains. We love to tell stories about our RMW animals and enjoy hearing stories from you too. It seems that guests really relate more to our animals if they know personal bits about them so sharing information can really help us all out!”

Thank you, Rebecca, for sharing with us your journey as a keeper. We love our keepers!! They are such a great resource to us and sometimes we forget to thank them for all they do!!

Sandy Flynn



Luna

2016-2017 CMZ Auxiliary Calendar

Meeting Times are 9:30 AM

Training Times are 9:00 AM – 4:00 PM appx.

Education Committee Meetings are held at 9:30 on the 4th Wednesday of every month in Safari Lodge.

**** Mandatory meeting. Bolded items - date or location has been changed.**

Feb 2017

1	Board Meeting	Safari Lodge
4	Joint IE/TE Meeting	Moose Lake
	Potluck Lunch with new trainees from end of meeting until 1:30 (12:30 for trainees)	
4	Training from 12:45	Safari Lodge
11	Training	Safari Lodge
18	Training	Safari Lodge
25	Training	Safari Lodge

March 2014

1	Board Meeting	Safari Lodge
4	Training	Safari Lodge
8	TE Meeting	Safari Lodge
11	IE Meeting	Library
11	Training	Safari Lodge
18	Training	Safari Lodge
25	Make-Up Training Day	Safari Lodge

GRAZERS AND BROWSERS UNITE



Come graze and browse with the herd, including the CMZA class of 2017, at the joint IE/TE meeting potluck! Please bring a salad, main dish, or dessert for at least 8-10 people. Social committee will provide drinks.

Saturday, February 4, 2017

11:30ish a.m. -1:30 p.m.

Lodge at Moose Lake

Deanna Martin-Muth and Gayle Flora

DECEMBER FINANCIAL REPORT

Restricted Account: In December we donated \$500.00 from King Soopers profits to Dr. Lisa Dadone's project "Fancy Footwork." Profit from King Soopers reloads was \$699.00. Ending balance in the Restricted Account \$26,055.98.

Operating Budget Account: \$105.13 was spent for DRC cleaning, Bell Tower cleaning, and on the copier. The Operating Account Budget ending balance was \$3492.83. If you wish greater detail of the December report, email me and I will send it to you.

And be aware that your King Soopers card and/or your Safeway card will expire if you fail to use it for three months **and** the balance on your card is zero. Your card cannot expire if there is money still on it. If your card, for lack of use, does expire, simply see me to purchase a new one. Lesson, always keep some money on your card!

Nancy Hochman

(Editor's Note: So use and reload them, early and often!)

AND SPEAKING OF STEM CELLS

(On January 13) we collected giraffe blood to try to grow stem cells for the first time in a giraffe. Our giraffe donor (Msitu) voluntarily stood in a large stall while we collected blood from her neck. We will now try to grow stem cells from this sample. If it works, we will use these cells to treat arthritis in one of our giraffe. This is the first step of the crowdfunding project many of you helped fund in November. Thanks for being part of such exciting work that can help our Zoo help giraffe. And thank you Amy, Diana, Kayla, Jeremy, and Rick for all your amazing giraffe training!

Liza Dadone



EdVenture Updates

Welcome our New Administrative Assistant!

Please join me in welcoming Francesca (Frankie) Medeiros to the EdVenture Team! Frankie has grown up in Colorado Springs, and has seen the zoo go through many changes over the years. Her favorite animals includes her dog, Darwin, and her cat, Sweet Stuff. She also has a background in visual arts and mixed media, and will bring a more creative side to the admin position.

For the last year Frankie has been an Office Manager in a local medical office and is eager to bring her strong administrative background to Cheyenne Mountain Zoo. *"I feel passionate about this position for its support to youth communities, as well as Cheyenne Mountain Zoo's mission of conservation"*, we believe Frankie will be a wonderful fit for our team. Though her main role with us is Administrative Assistant, her position also includes coordinating special events volunteers- and with Run to the Shrine coming up fast, Frankie will have to hit the ground running (pun intended!).

Frankie begins her new position with us on Monday, January 23rd. She is new to the zoo, so training her fully will take a little longer than prior Admins, so we ask for patience and understanding as we work through this process with her.

Please be sure to welcome Frankie to the zoo when you see her!

Stacey Graham



AN UPDATE FROM ME, DAISY, THE YELLOW-FOOT TORTOISE

So this is Daisy reporting! If you remember, I am the tortoise that was very sick last spring. My human took me home from a pet store when she found me there and I was feeling very sick. I just did not feel like eating or opening my eyes and my skin had sores all over it. I tried really hard but I just wanted to sleep forever. I went to the really nice tortoise doctor a lot and had to get a tube in my neck so my human could feed me. I was just so tired like my beak wouldn't even want to work. But then things started to slowly change! I spent lots of hours last summer outside with the sun warming my carapace. My human gave me lots of baths and vitamins and my skin got better! I could move without pain and open my eyes! The tortoise doctor even said my x-ray showed that my shell was stronger! I started to feel like maybe, just maybe my beak wanted to taste food again! Then one day in September I just couldn't turn down a fat, juicy strawberry! I knew my human was watching me and I felt pretty shy, but the scrumptious berry was just too much to resist! My human started jumping up and down and crying. Humans are rather odd sometimes. It was just a month later that my human removed my feeding tube. I am like a new tortoise! Every morning I just can't wait to feed and my human says I have gained 25 percent of my weight, whatever that means! My favorite food is strawberries, of course, but my human feeds me lots of green stuff too. I love most my baths at night and I can't wait for the cold white stuff to go away outside so I can go back into the sun! I am a very happy tortoise indeed! I wanted to give up so many times and my heart felt really super broken. But you never know what tomorrow will bring. I am so glad I kept fighting. My human says I am a miracle and she loves me with all her heart. I know I am displaced and far from where my kind should be, but I know I have found my forever home. Love, *Daisy, and my human mom Cynthia Preston*



Daisy and her best friend having a soak

A SUSTAINING DOCENT REPORT FROM THE LIVING DESERT

The Tenny Wildlife Hospital and Conservation Center at The Living Desert has been open since 1/26/02. It was a seven million dollar (plus) gift to The Living Desert from Joan Tenny, who wanted a facility that would allow visitors to view the veterinary teams working on the animal collection. The state-of-the-art facility was conceived and constructed to bring the highest quality of care to The Living Desert's animal collection, but also designed with the human visitors in mind.

They are involved in several research projects: they have worked with researchers from MIT in studying the ear canals of sand cats and identifying the sounds they are able to detect. The Living Desert has the largest collection of sand cats in the country. In 2004, a group of researchers from Cincinnati Zoo asked them to participate in a reproductive study of sand cats.

In another project, they collect biopsies from the stomachs of their cheetahs to study the helicobacter organism and its effect on the stomach.

In their preventative health program, the majority of The Living Desert animals get examined on a yearly basis, while some are examined every other year. Visitors have the opportunity to watch the exams. The hospital was built to accommodate

large and small animals alike; however, larger animal exams (like giraffes and camels) are better performed in the field. My photos were of the exam of one of their porcupines. There is another exam room that easily accommodates large cats.

Cherri Disque, CMZ Sustaining Docent



Surgery/nail clipping for porcupine

Vet is in blue sweatshirt



**Since it is winter, maybe some flutterbys from
The Living Desert will cheer us up**

Another thanks to Cheri



Gray Cracker



Black Swallow-tail

KNOW YOUR AUDIENCE

As docents we are constantly in conversation with guests, staff, and fellow docents. In these interactions we should be aware of what we are saying and who we are saying it too. We say things to other docents that we would not say in front of a guest or even in front of a staff member. I would even go so far to say there are things we might say to a keeper that we would not say to Bob Chastain, our CEO. Other times we might make a comment to an adult guest that we would not say to a child.

As docents we are bound to eventually witness breeding behavior. How we respond depends on our audience. Some great responses are:

- Breeding behavior is natural in all animals
- Animal's that are not healthy and well cared for will not do this, so it is a great sign that we are providing them with an environment that meets their needs.
- This is a sign that our animals are healthy and active.

Another example of appropriate responses to urination/defecation is:

- Animals naturally urinate/defecate.
- Our animal care staff clean our animal exhibits daily.

Over sharing is never a good choice. It is better to err on the side of too little information rather than too much information. It is a fine line as to what will offend a guest and there will always be times that we never saw coming. Staff, whether it be keepers, maintenance, guest services, or upper

management may be just around the corner and though we don't want to be nervous about that we are saying, as volunteer educators we want to be careful with our words even in a joking manner.

These examples came from a more extensive publication '**Subjects of Concern**' that the zoo put out a few years ago. If you would like a copy of the entire publication let me know and I will e-mail it to you. *Jeanie Baratono*

WHY ZEBRAS HAVE STRIPES

Quote from an article in the Gazette by Tim Caro; "Most animals are boringly colored, drab browns or grays". But zebras? Their stripes are stark, beautiful and decidedly strange, the sort of marking found elsewhere in the animal kingdom typically on fish and snakes.

To find the answer Caro, a wildlife biologist, has spent 10 years toiling under the Tanzanian sun to find out. The purpose of zebra stripes has perplexed scientists at least since Darwin debated the matter with fellow Victorian naturalists about why zebras have evolved to look the way they do. Among some of the most commonly tossed around and accepted ideas by the general public, not to mention safari guides, are that the stripes serve as camouflage to confuse predators. Also that the markings help zebras identify one another, ward off biting flies, regulate a zebra's temperature or warn attackers in the way a skunk's stripes signal that it's got stinky spray and is willing to use it

But none of these has been proven. So Caro decided to test each idea one by one in the field over a decade of summers. Caro used the scientific method to check each hypothesis, which was not an easy task. Using ingenuity, he decided that because flies typically land on moving animals, stripes in motion would require testing. So Caro had a black and white zebra striped pajama like suit made to wear and began walking slowly through zebra territory. He started to count how many flies landed on him, which was rather a nerve racking task because walking, draped in a zebra skin, through national parks that have high lion populations while a long way from the car is not the most sensible thing to do. Alas, it did not

provide the silver bullet answer he was searching for.

The most plausible answer was found when Caro and other scientists began using maps of where zebras and other horse-like species with varying degrees of stripes live. The group overlaid those areas with maps showing where lions and biting flies are found. They also accounted for other factors like temperature and climate. “The one item that came out loud and clear from that comparative analysis was that striped animal populations are associated with biting fly abundance.” Several previous studies have found that biting flies, including tsetse flies, don’t like to land on striped surfaces. And considering that tsetse flies are not only irritating, but carry lethal diseases and drain Zebras of blood it would be beneficial to have a way to deter these savannah pests. They decided Zebras have stripes to deter flies from landing on them.

In the end scientists felt they had found the answer to why zebras have stripes. That’s right, zebras have stripes to deter flies!

As printed in the Gazette Telegraph and forwarded and paraphrased by Glenn Carson



Tim Caro. Author of **Zebra Stripes**, University of Chicago Press

He has also studied camouflage.



Photo: A small group of plains zebra as they might appear to a human and lion under photopic (bright; daylight), mesopic (dim; dusk), and scotopic (dark; moonless night) conditions. Stripe visibility falls off from human to lion vision and as ambient light declines (Image courtesy of Tim Caro, from Melin et al. 2016).

Caro and others including, Susanne Åkesson, an evolutionary biologist from Lund University in Sweden, were also studying this issue. Previous studies had shown that tsetse flies and horseflies preferred landing on white surfaces to dark. So Åkesson and her colleagues started with something they knew about horseflies. Their previous work found that the insects were most attracted to dark-colored horses, compared with white horses, because darker coats reflected light waves oriented in the same direction. This polarized light was the same as that reflected from pools of water, where the flies lay their eggs. White coats didn't reflect this type of polarized light.

To see whether a zebra's white stripes would make it less attractive to tabanids, the team set up a series of experiments on a Hungarian horse farm. They tested the attractiveness of solid black or white, or black and white striped squares to tabanids, as well as black, brown, white, or striped life-sized plastic horses. They also tested gray squares with varying numbers and widths of stripes to see how patterns affected horsefly preference. Researchers used vegetable oil to trap tabanids that alighted on their experimental squares and coated the plastic horses with a clear, odorless glue to nab flies when they landed.

It turns out that **stripes are even less attractive to tabanids than solid white-colored surfaces**, the team reported in February 2012 online in *The Journal of Experimental Biology*. That's because stripes reflect multiple light patterns, whereas solid colors reflect uniform patterns, which these flies prefer, the authors say. So even a solid white square is preferable to stripes. Reprinted from 2012 article.

SPECIAL AND IMPORTANT REMINDER!
Don’t forget to come to the annual joint meeting at the Lodge at Moose Lake. Bring a special dish for the potluck lunch and welcome our new trainees. Our program will be presented by Dr. **Liza Dadone**.



CMZ Auxiliary ZooLine
February, 2017

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