

# ZooPrints

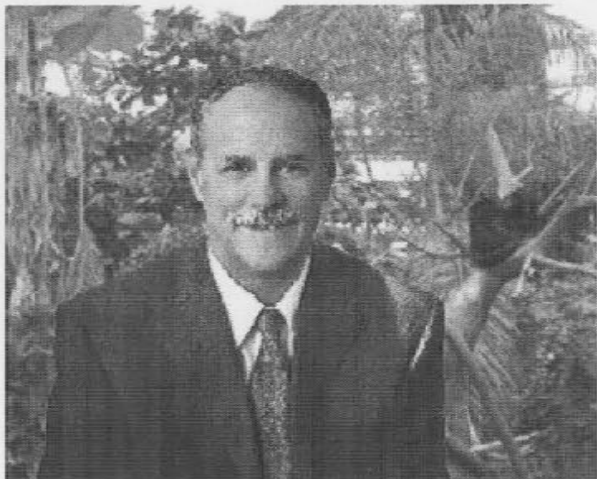
Conservation Special Edition



Life's best things.

OK

## Letter from the CEO



Welcome to another special conservation edition of ZooPrints. Another season is beginning to breeze on by. And this time of year, we turn our focus entirely to the conservation efforts put forth by Omaha's Henry Doorly Zoo and Aquarium staff.

Last issue, our dedicated group of animal care staff and scientists took you on an adventure to the depths of South Africa, the forests of Madagascar, the coral reefs in Curaçao and the creek beds <sup>of</sup> in Nebraska. This time, we've encountered similar adventures, but with very different focuses. For instance, page 5 captures our Zoo's most recent trip to

Madagascar, where we continue to uncover more secrets into the lemur population and habitat. In addition, page 7 gives a glimpse of our veterinary staff's recent trip to Belize working with partnering zoos to build a research facility to support Central America's diverse wildlife. ⑤

Our commitment to conservation never seems to grow thin and with your continued support, our drive and passion to protect plants and animals for generations to come grows even stronger. With that, I encourage you to give these stories a read and learn about the behind-the-scenes adventures that are the bread and butter of Omaha's Henry Doorly Zoo and Aquarium's commitment to conservation.

A handwritten signature in black ink, appearing to read 'Dennis Pate'. The signature is stylized with a long horizontal line extending from the end.

Dennis Pate  
Executive Director and CEO

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# Reviving Animal Populations Through New Partnerships

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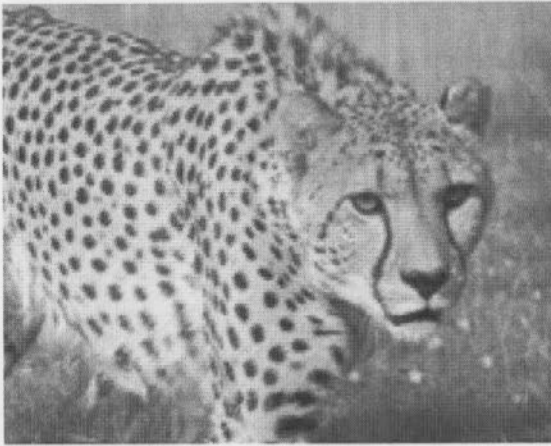
Having enough space to effectively breed and produce offspring that are socially and behaviorally competent, healthy and adaptable is key when trying to maintain strong populations of endangered wildlife.

The Conservation Centers for Species Survival, C2S2 for short, has just that. Formed in 2005, C2S2—with support from <sup>the</sup> U.S. Fish and Wildlife Service—manages more than 25,000 acres of specialized habitat and handling facilities dedicated to endangered species recovery. These facilities are geographically distributed across the United States at five partner institutions: Fossil Rim Wildlife Center in Glen Rose, Texas; San Diego Zoo Global in San Diego, California; Smithsonian Conservation Biology Institute in Front Royal, Virginia; the Wilds in Cumberland, Ohio; and White Oak Conservation Center in Yulee, Florida.

With the help of these institutions, C2S2 has been able to provide naturalistic homes to a <sup>wide range</sup> ~~scale~~ of endangered species in the <sup>above</sup> states—such as the California condor and Florida panther—and abroad, like cheetahs, elephants, giant pandas and Przewalski's horses. In addition, they're able to research the fundamental biology of each species so the animals can one day be reintroduced in the wild.



Another institution has just been added to C2S2's list of partners to help fight the conservation crisis: Omaha's Henry Doorly Zoo and Aquarium in Omaha, Nebraska.



Omaha's Henry Doorly Zoo and Aquarium made its partnership with C2S2 official on Jan<sup>uary</sup> 1, 2013. It's the first zoo outside of the organization's founding

group to be asked to join, and is unique in that it will also utilize Wildlife Safari Park as a resource. <sup>the partnership</sup>  
<sup>the Zoo's</sup>

A leader in animal conservation and research, the Zoo will play an advisory role in <sup>C2S2</sup> ~~the organization~~ for sable antelope, addax and cheetah conservation.

Omaha's Henry Doorly Zoo and Aquarium and other zoos alike are unable to hold large populations of every animal. The Zoo is focusing on the large populations of species it already has, some of which are being housed at Wildlife Safari Park. In turn, the Zoo will make sable antelope and cheetah offspring available to other facilities.

In the future, Omaha's Henry Doorly Zoo and Aquarium hopes to expand its list to include cranes, amphibians and plants.

Cover Photo: Omaha's Henry Doorly Zoo and Aquarium is a leader in cheetah conservation and research. Amanda Mohn, a licensed veterinary technician ~~at Omaha's Henry Doorly Zoo and Aquarium,~~ is performing a medical procedure on a cheetah at the Zoo.

*with us,*

## 2 ZooPrints

**Omaha's Henry Doorly  
Zoo and Aquarium®  
Executive Staff**

**Executive Director and CEO**

Dennis Pate

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Danny Morris

**Chief Financial Officer**

Jeremy Eddie

**General Curator**

Dan Cassidy

**Director of Communications,  
Marketing and Sales**

Dawn Ream

**Director of Education**

Elizabeth Mulkerrin, Ed.D.

**Director of Human Resources**

Craig Jacobs

**Director of Membership  
and Guest Services**

Sue Lyons

**Director of Facilities**

Brian Timm

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## Executive Director

Tina Cherica

Omaha's Henry Doorly Zoo and Aquarium has implemented a lights-off program to conserve energy. This bright idea calls for all Zoo staff members to hit the lights at the day's end. You, too, can take part in this challenge. Just cut out our "lights off" emblem below and place it above your light switch as a reminder.

**Leaving?**



*delete  
extra space*

**Please turn the lights off**



# Prominent Zoo Supporter Suzanne Scott Remembered

Suzanne Scott, a longtime supporter and board member of Omaha's Henry Doorly Zoo and Aquarium, passed away this past September at the age of 83.

Scott, the wife of Walter Scott Jr., was known to those outside of the Zoo as Suzanne: a prominent Omaha philanthropist who put community involvement first in the city she loved most, a place where many buildings bear her name.

To Zoo staff members, she was simply Sue: the vision for the world-renowned penguin exhibit in the Suzanne and Walter Scott Aquarium, worker bee and one of the family.

While she may be difficult to spot in Omaha's Henry Doorly Zoo and Aquarium's collection of photos taken over the years, this undercover donor's legacy is hard to miss.

Scott originally started out as a volunteer at Omaha's Henry Doorly Zoo.

She was later hired in 1984 as the founding executive director of the Omaha Zoo Foundation, where she doubled the size of the Zoo's membership campaign during her tenure.

Scott was also involved in the transport of two baby gorillas to Omaha's Henry Doorly Zoo and Aquarium from the Cincinnati Zoo, one of whom was the world's first test-tube gorilla, as well as trips to Africa and China with Zoo staff working on a movie for the Lozier IMAX® Theater and on a quest for giant pandas.

Scott and her husband Walter are most notable for their leadership <sup>in</sup> ~~on~~ the development of the Kingdom of the Seas Aquarium, which opened in 1995 and was dedicated to the Scotts' grandchildren.

The Scott Aquarium underwent expansive renovations as part of the Omaha Zoo Foundation's Gateway to the Wild campaign and reopened to the public on April 5, 2012.

Sue's Carousel, a 36-foot carousel featuring 30 wild animals and horses, also bears her name.

Other community organizations and affairs were also touched by <sup>Suzanne</sup> Scott's leadership and energetic giving, including the Boys and Girls Clubs of the Midlands, Children's Hospital and Medical Center, Children's Hospital and Medical Center Foundation, Goodwill Industries, Joslyn Art Museum, Holland Performing Arts Center, The Salvation Army Advisory Board and the University of Nebraska Medical Center.

She also served as board chairs for Bellevue University and United Way of Midlands, and chaired the Ak-Sar-Ben Women's Ball Committee.

# Nutrition Research in Endangered Species Management

Dr. Cheryl Morris, Associate Scientist, Comparative Nutrition

*data and published*

The nutritional requirements available ~~for~~ <sup>on</sup> exotic species are few and far between. Extensive research is necessary to formulate optimal diets for these animals. Omaha's Henry Doorly Zoo and Aquarium's Nutrition Department's research program is focused on the development and promotion of optimal nutrition to help bring about a greater understanding of this great unknown.

*STET, leave as is*

Through this program, Omaha's Henry Doorly Zoo and Aquarium nutritionists have recently developed a pork-based carnivore diet for Zoo felids, or cat species, that will be accessible to all zoos later this year.

Pork meat is not traditionally used in zoos. Use of this meat was viewed as an opportunity to develop a complete diet that would provide a novel protein to felids and other carnivore species.

When considering the overall health of carnivores, having a novel protein in their diet is beneficial, as it provides natural variety to the carnivore's overall diet plan. Natural variety is a component of environmental enrichment, which improves overall health and well-being of the managed species. In addition, a novel protein that is easily accessible, such as pork, provides an ingredient that can be useful in managing felids with sensitivities to other meats like beef.

Omaha's Henry Doorly Zoo and Aquarium's Nutrition Department has also critically analyzed the diets of lemurs managed in zoos.

Samples of plants consumed by wild lemurs in Madagascar were





collected, dried and shipped to the Zoo's nutrition laboratory and examined for key nutrients in a collaborative study with the University of Illinois at Urbana-Champaign. A survey was conducted with Association of Zoos and Aquariums <sup>members of the</sup> ~~certified~~ <sup>long dash →</sup> zoos that currently manage lemur populations to collect data on their diets. Data gathered from the study was then compared to nutrient values of the native plants in Madagascar. Results suggested that dietary fibers and fats were significantly lower in zoo diets. These findings have provided a better understanding of lemur nutrition <sup>along with</sup> ~~and~~ <sup>^</sup> necessary data for organizations formulating lemur diets. Many of the managed species in zoos can suffer from similar ailments experienced by humans, such as obesity.

In 2009, Omaha's Henry Doorly Zoo and Aquarium's Nutrition and Great Apes Departments began an extensive series of diet adjustments to improve the weights of ~~the~~ <sup>the Zoo's</sup> male gorillas in Hubbard Gorilla Valley.

Many of the male gorillas at this time were fed a high-sugar, high-starch diet and were significantly overweight. Both departments adjusted their diets to reduce the caloric content by 30 percent, without decreasing the total volume of food, to provide optimal nutrition. This change ~~eventually~~ <sup>in</sup> resulted in an increase of dietary fiber, ample browsing opportunities and more variety for the male gorillas.

By May 2013, all of the gorillas' body conditions were assessed and <sup>found to be</sup> ~~were~~ in optimal condition, with no further weight loss indicated.



## Omaha Zoo Chairman Receives Innovative Conservation Award



Dr. Lee G. Simmons, Omaha Zoo Foundation chairman, was named the 2013 recipient of the Conservation Breeding Specialist Group's Ulysses S. Seal Award. This award is given to those who exemplify innovation in applying science to conservation.

Some of the projects and ideas that led to this honor include the creation of a number of different drug delivery systems that are much safer and more reliable to anesthetize animals in captivity and in <sup>the wild</sup> ~~situ~~, as well as the advancement of Omaha's Henry Doorly Zoo and Aquarium's reproductive science and molecular genetics fields through hands-on research.

<sup>Simmons'</sup> His support for the Zoo's Genetics Department helped make possible

the Zoo's comprehensive program in Madagascar, which led to the discovery of 21 new lemur species.

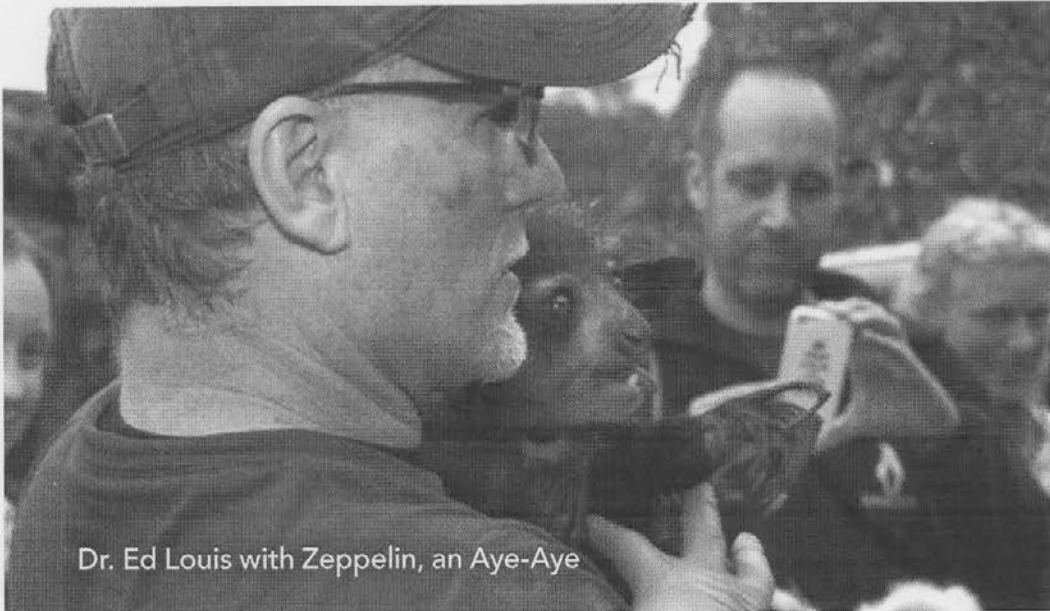
Under Dr. Simmons' mentorship and support, Bermuda ferns, extinct in the wild, were propagated at Omaha's Henry Doorly Zoo and Aquarium's plant laboratory and returned to their natural range. Thousands of rare Malagasy orchids have also been reintroduced to their natural habitats.

Most recently, <sup>in response</sup> ~~responding~~ to the International Union for Conservation of Nature's urgent call for the international zoo community's assistance in facing the amphibian extinction crisis, Dr. Simmons led the design and construction of a cutting-edge facility for captive assurance populations at Omaha's Henry Doorly Zoo and Aquarium.

Jargon word (don't know what this means). Rewrite in common terms. Looked up: means maintaining a viable breeding population for later reintroduction into the wild.

# Notes from the Field

Dr. Edward Louis, Director of Conservation Genetics



Dr. Ed Louis with Zeppelin, an Aye-Aye

For me,

^

Another year brings <sup>with it</sup> new adventures to the island nation of Madagascar, the only place in the world where you can find wild lemurs. Since coming to Madagascar 15 years ago, I have visited more than 160 sites <sup>here</sup> and studied more than 5,000 lemurs. Much of the field <sup>work</sup> is now done in collaboration with the Madagascar Biodiversity Partnership, a non-governmental Malagasy organization, which evolved out of Omaha's Henry Doorly Zoo and Aquarium's conservation programs.

After 23 hours of flying, I arrived in Antananarivo, the capital city, and immediately jumped into one of the program's four-wheel-drive trucks—something I learned you cannot get anywhere without. I traveled up north to Sahamalaza, a protected site managed by Dr. Christoph Schwitzer from Bristol Zoo in Bristol, England. We helped their program by putting tracking collars on the critically endangered Sahamalaza sportive lemur. The coastal site of Sahamalaza is the sole place to see this small chinchilla-sized lemur, as well as the blue-eyed black lemur—the only primate besides humans to have blue eyes.

After a brief but successful trip, I traveled further north near the port city of Antsiranana, one of Omaha's Henry Doorly Zoo and Aquarium's four permanent sites. Here, our conservation program is working to save the most endangered lemur and arguably the world's <sup>the</sup> most endangered primate, the northern sportive lemur. One of 50 remaining individuals is nicknamed Sir Branson, after lemur

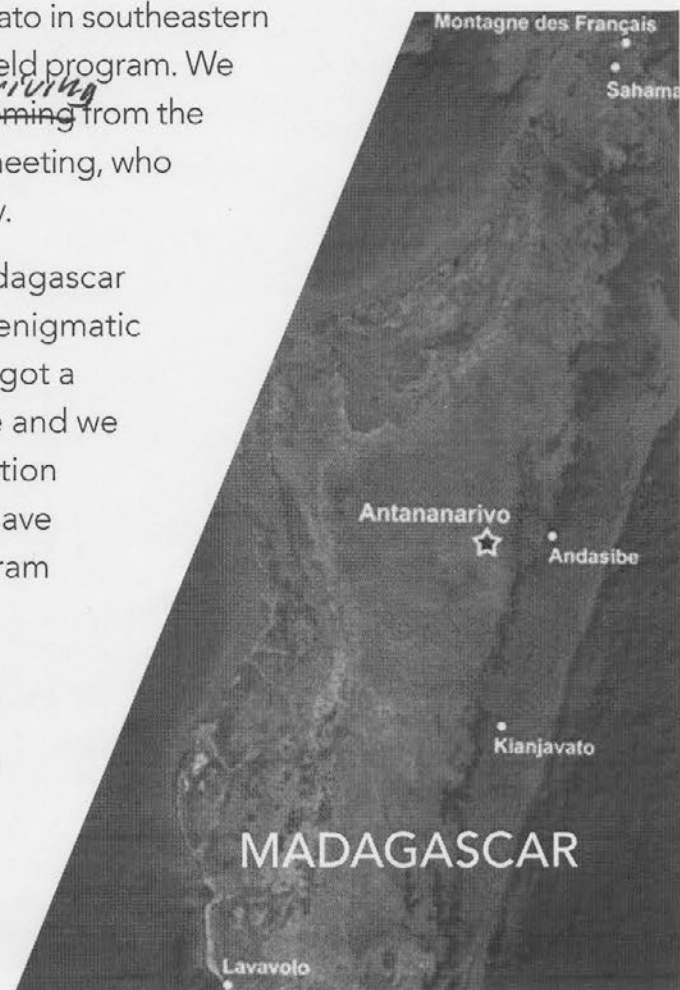
ambassador and Virgin Group founder Sir Richard Branson. By following this lemur over the next year, we hope to learn more about this species' courtship behavior and interactions. Sadly, the lemur's forest—Montagne des Français—is rapidly being destroyed for charcoal. Our team is fervently working with the local community to ~~stop this habitat from disappearing~~ by introducing alternative fuel sources and building a reforestation program.

After my work up north, I rushed back south to the capital city to participate in the release of the first lemur strategic plan since 1993, which I was ~~happy~~ <sup>fortunate</sup> to be involved <sup>with</sup> as a co-editor. This plan addresses the problems that ~~Madagascar~~ <sup>the nation</sup> faces in saving lemurs and has identified 30 priority sites in which 90 percent of all lemur biodiversity is found. Included among these priority locations are Omaha's Henry Doorly Zoo and Aquarium's four permanent field sites. Since lemurs are now considered the most threatened group of all mammals, it is our hope that this strategic plan will provide guidance <sup>for</sup> to maintaining this biodiversity for years to come.

Next, my travels took me to Kianjavato in southeastern Madagascar, home to our largest field program. We excitedly prepared for 50 visitors <sup>arriving</sup> coming from the International Prosimian Congress meeting, who were in for something extraordinary.

Kianjavato is the only place in Madagascar where ~~it~~ <sup>one</sup> is guaranteed to see the enigmatic nocturnal aye-aye. Our visitors all got a chance to see ~~an aye-aye~~ <sup>one</sup> up close and we were happy to share our conservation story of studying and working to save this species. Since 2010, our program has been using radio collars to monitor these elusive lemurs. We currently follow three adult males and one female named Bozy, who gave birth to her second baby in June.

continued on page 8



↑  
Sahamalaza  
try not  
to cut  
off

Blue-eyed black lemur



Sir Branson, a northern  
sportive lemur

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