

An insider magazine for members of the Zoological Society of Milwaukee | Winter 2011



The mission of the Zoological Society is to take part in conserving wildlife and endangered species, to educate people about the importance of wildlife and the environment, and to support the Milwaukee County Zoo.

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Alive is published in January, April and October by the Zoological Society of Milwaukee County, 10005 W. Blue Mound Rd., Milwaukee, WI 53226. Subscription by membership only. Call (414) 258-2333 for information. www.zoosociety.org

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Those of us who value animals often think of our Zoo as a refuge - kind of a wildlife preserve. Here on the grounds of the Milwaukee County Zoo we protect many animals that would not live if returned to the wild. Our two whooping cranes have injuries that would make them vulnerable to predators. Our Guam kingfishers are the most endangered bird species on Earth. There are only 134 of these birds in the world. They're all protected in institutions because they would be killed by an invasive species of snakes if returned to

their native Guam. And our Belizean jaguar, Pat the Cat, was saved from being killed by angry farmers and is alive because the Belize Zoo took him in temporarily and our Zoo gave him a permanent home.

Wildlife preserves and zoos provide more than just protection for animals. They offer experiential education. I was reminded of this last August while leading a Zoological Society of Milwaukee and Zoo photographic safari in Kenya (see page 6). While visiting the Masai Mara National Reserve, part of the Serengeti ecosystem, we observed the world-famous "great migration" of wildebeest and zebras close up - along with lions that were preying on them.



Dr. Bert Davis (right) at Kenya's Samburu National Reserve with members of the August 2010 Zoological Society safari.

It's a visceral experience to view the cycle of life and death so intimately. It's also educational (see page 12). It reminds us that when humans interrupt the life cycle by destroying wildlife habitats or hunting animals to extinction, the balance of nature is upset. And we humans and all other life forms can suffer the consequences.

Here at our Zoo, we remind you of the balance of life through our renowned predator-prey exhibits. The outdoor lion yard, for example, is separated by a hidden moat from the African Waterhole Exhibit, where prey such as zebras roam. This is part of the education mission of the Zoo. The Zoological Society shares that mission. We help the Zoo by providing numerous educational experiences for zoogoers, from programs on Zoo grounds to talks by members of Zoo Pride, our volunteer auxiliary (see page 4).

In 2010, the ZSM's centennial year, a new partner joined us to provide public education programs about wildlife and conservation. Kohl's Department Stores has given the ZSM and the Zoo \$1 million over three years to create Kohl's Wild Theater (see page 4). The donation comes from Kohl's Cares® cause merchandise program, which sells special merchandise, including plush toys and books, and donates 100 percent of the net profit to benefit children's health and education initiatives nationwide. Kohl's Wild Theater includes live, participatory theater shows at the Zoo as well as outreach programs that will be brought to a diverse array of Milwaukee-area schools and community organizations. The Kohl's Wild Theater program is designed to inspire children to admire and respect our animal ambassadors, care more about conservation and learn ways to help animals. The program will deliver education and conservation messages in a creative way. In essence, we hope to provide enhanced, experiential education both here at our great Zoo and in the Milwaukee community. We're thrilled to partner with Kohl's as they support our mission to teach children about animals and their natural environments.

Dr. Robert (Bert) Davis Chief Executive Officer



4 Fun & Free for You

From volunteer talks to animal "show and tells," the Zoological Society and Milwaukee County Zoo offer fun. fast and free education to all visitors.

6 A Wild Refuge

Scenes from a safari: how wildlife parks in Kenya are helping to save rare and endangered animals. **WEB:** From meeting conservationists to spotting cheetahs up close, one traveler blogs her safari, zoosociety.org/africablog.

8 On the Job: Helping Hands for Animals They draw blood. They give shots. They deal with difficult patients. Meet the Zoo's veterinary technicians.

9 Conservation Chronicles: Curious About Penguins

Who makes a good scientist? Hear from Dr. Alejandro Simeone of Chile, who has worked with the Zoo and Zoological Society for 16 years doing Humboldt penguin research. WEB: zoosociety.org/penguinstudies

10 Out Come the Cameras

Learn why amateur photographers admire our Zoo. Get some tips on photographing animals.

(Summer Camps brochure packaged with this Alive)

Where can kids write an animal skit, play "mad scientist" or pretend to be zookeepers? How about the Zoological Society's popular Summer Camps, sponsored by Noodles & Company. The camps, offered for children ages 2 through 14, include Zoo tours, art projects, games and other fun. A few camps will tour the Zoo's special summer exhibit, Butterflies! In Living Color. Some camps are offered for a child to take with a favorite adult. For other camps, the child attends by herself or himself and makes new friends. A brochure packaged with this Alive lists all camp offerings.

Camps fill fast! Starting Jan. 2 through Feb. 4, Zoological Society members can reserve a time slot to register at zoosociety.org/Education. Camp registration begins on Feb. 10 (see the brochure for registration details).

14 What's Gnu

Rhino courtship, un-"bill"-lievable rhinoceros hornbills and red-billed hornbills, and a new male tayra.

WEB: zoosociety.org/gnu

Kids Alive 12-13 Want to meet a real-life Simba the lion? Explore the African savanna, count hippos. learn Swahili and help a baby wildebeest find its mom. WEB: Hear what animal names in Swahili sound like from a native speaker: zoosociety.org/Swahili.

Contributors

See the insert packaged with this Alive that includes a list of Serengeti Circle members and Platypus Society members.

ON THE COVER

Mimi, the Zoo's female black rhino. See page 14.



Fun & Free for You

A 7-year-old boy stands in front of the Zoo's giraffe exhibit on a summer day, watching in wonder. "How do giraffes sleep?" the boy asks his mom. She isn't sure. She asks a Zoo Pride volunteer stationed nearby. "They sleep standing up!" answers the volunteer. "Do you think they sleep a lot?" The boy nods yes. "Actually, they sleep only 30 minutes a day. That's because in the wild, giraffes have to watch out for predators, like lions!"

You've just witnessed a bit of public education at the Milwaukee County Zoo. What's public education? Thanks to the **Zoological Society** of Milwaukee (ZSM) and Zoo staff, it's education that's fun. fast and, yes, free with Zoo admission. It's education that's for all learning styles, from visual to social. And it's education that ranges from volunteer talks to a new theater program

More than 230 Zoo
Pride volunteers give
free, informal talks at
the Zoo. Here Joyce
Diliberti (left) and Sue
Niederjohn answer
questions about the
elephants from a mom
and daughter.

that will launch in summer. "Zoo animals are ambassadors for animals in the wild," says Dr. Robert Davis, Zoological Society CEO. "We want to give every single Zoo visitor the chance to appreciate these incredible animals as well as our impact on their habitats in the wild." As part of its Zoo support mission, the ZSM runs an eight-classroom education center and helps provide a variety of public education programs at the park. Here's a run-down on the offerings:

Live, from the Zoo: Imagine coming upon live theater in front of the Zoo's Humboldt penguin exhibit. Two costumed performers act out a skit about challenges Humboldt penguins face in the wild, sing a song and invite kids to join a penguinthemed game. Welcome to Kohl's Wild Theater, made possible by a \$1 million donation from Kohl's Department Stores over three years. The donation comes from Kohl's Cares® cause merchandise program, which sells special merchandise, including plush toys and books, and donates 100 percent of the net profit to benefit children's health and education initiatives nationwide. Kohl's Wild Theater, which launches in May 2011, will feature live, 12- to 15-minute professional shows in the Zoo's Northwestern Mutual Family Farm during the summer season*, all free with Zoo

admission. Plus, performers will stage quick skits in front of Zoo exhibits several times daily. "We're thrilled to partner with Kohl's as they support our mission to teach children about animals and their natural environments," says Dr. Robert Davis. The theater will serve as a fun introduction to wildlife and science, adds program coordinator Dave McLellan, who has worked as a resident artist for a zoo theater program in New York City. "Kids and families

will get to learn about conservation in a more creative and entertaining way than expected." Kohl's Wild Theater also will take free programs to schools and community groups in fall 2011.

Talk & Touch:

Actors aren't the only educators you can meet on Zoo grounds. More than 230 khaki-clad Zoo Pride volunteers give informal talks throughout the park nearly year-round. What's a bonobo? How old is orangutan toddler Mahal? Ask

away! The volunteers, called summer and winter guides, are stationed near outdoor exhibits in the summer* and in the Zoo's animal buildings in the winter. There's even a volunteer committee devoted just to primates. You can catch talks May through September in front of the Zoo's great ape exhibits. If you want to see animal artifacts such as fur, teeth and bones, head to the Remains to be Seen Carts, also staffed by volunteers. The carts are stationed in Zoo buildings every weekend through April, and every day May through August (see **zoosociety.org/Visit** for all locations).

Quick Reads: Fun, funny and colorful, animal information signs at the Zoo educate and entertain. Produced by Zoological Society artists, the signs feature punchy facts and big photos. All signs start with research and go through an extensive review by curators, zookeepers and the ZSM's educators. "I like to point things out on the signs with subtle visual aids or some humor added in," says Julie Radcliffe, the ZSM's interpretive graphics manager. She and Creative Director Marcia Sinner also added an artistic perspective on wildlife to the Zoo last year by creating 54 whimsical signs, artworks and installations to display nature poetry. The poetry displays are part of a project called the

Language of Conservation (see **zoosociety.org/poetry** for more). For hands-on learners, the ZSM artists create interactive displays

with buttons, music and video screens. For an example, visit the big-cat "mound" (or interactive area) in the Florence Mila Borchert Big Cat County. Or stroll to the back of the Zoo's Animal Health Center, where you'll find an interactive area called the Holz Family Foundation Learning Zone. There you'll learn how veterinarians and other specialists care for Zoo animals.

Zookeepers in Action:

Who knows the animals better than zookeepers? In the summer season*, keepers give Animals in Action talks at the outdoor camel and elephant exhibits and in the Small Mammals Building at the bat exhibits. After the talks, Zoo Pride volunteers answer visitor questions (see Zoo map for times). In the Aquatic & Reptile Center, visitors can watch keepers feed sharks and fish in the Amazon River aquarium. Farm attendants combine touch with talking at Stackner Animal Encounter talks in the Zoo's Northwestern Mutual Family Farm. Here youngsters can

touch farm critters such as ducks, chickens and rabbits after an introduction by attendants (talks given daily in summer*).

Show & Tell: Whether they fly through the air or the water, birds and marine creatures are featured in the Zoo's summerseason* shows. Bird trainers present charismatic owls, hawks, eagles and more in the free Birds of Prey Show, held at the Kohl's Wild Theater in the Zoo's Northwestern Mutual Family Farm. (For a small fee, you can watch seals and sea lions perform and learn about marine conservation in the MillerCoors Oceans of Fun Seal/Sea Lion Show at the Zoo.)

Teacher Tips: Before heading to the Zoo on a field trip, head to the ZSM's Web site, **zoosociety.org**. We offer free, self-guided, school-class tours and scavenger hunts to download. Activities are offered for kindergarteners through the 12th graders and span subjects from animal names for younger kids to zoology for high school students. All materials are available here: **zoosociety.org/fieldtrips.**

For a Fee: The Zoological Society also offers many fee classes and camps at the Zoo for ages 2-14 nearly year-round. Please see zoosociety.org/Education for details and registration. The ZSM's Conservation Education Department also presents a variety of fee programs for school and scout groups. For details, see zoosociety.org/Education/school.

By Julia Kolker









Clockwise from top right: Kohl's Wild Theater will feature wildlife-conservation messages in theater performances.

Farm attendants talk about animals such as this African hissing cockroach. Audiences get a close view in free presentations at Stackner Animal Encounter at the Zoo.

Photo by Gabbi Chee

Matthew Bachmann, 5, of Lake Mills, waits for a red-crested turaco to hop into his hand during a free Milwaukee County Zoo bird show.

Orenthia James Jr. of Milwaukee's Barton Elementary School studies a sign about snow leopards. Zoological Society staff create Zoo signs that are both fun and educational.

A Will Refuge

I'm standing in the middle of the African plain, watching a Rothschild's giraffe from a short distance. The tall and calm animal moves gracefully through the grass, as if walking on water. It's so quiet that I can hear the soft crunch of twigs under its hooves. It's August 2010, and I am fortunate to be in Kenya, Africa, as part of a Zoological Society of Milwaukee safari. The trip, offered in celebration of the Society's centennial, took six people, including Zoo Pride volunteers and the Society's president, Dr. Robert Davis, on an eco-themed journey through Kenya's magnificent nature parks.

magnificent nature parks.

Such parks place visitors breathtakingly close to animals. But the parks also protect wildlife and help scientists study animals. Consider Kigio Wildlife Conservancy, located 75 miles north of Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital. A onetime farm, Kigio is now a 3,500-acre private preserve that's home to Nairobi, Kenya's capital h

Another endangered animal that's getting a sanctuary in wildlife parks is the Grevy's zebra. The Zoological Society has helped save Grevy's zebras by supporting the Lewa Wildlife Conservancy, a private sanctuary in Kenya. Grevy's zebras, found only in Kenya and a small part of Ethiopia, have been hurt by poaching, disease and drought. The Grevy's zebra is notable for its white belly, while the much more common plains zebra has stripes on its belly. The Samburu National Reserve, our first stop on the trip, is home to about 25% of the world's Grevy's zebras. One day, we watch a zebra graze near a waterhole that's just yards from the dining room in our lodge.

Located in central Kenya, Samburu is also home to hundreds of African elephants, giraffes, and even big cats. The animals hunt, eat, sleep, breed and raise their young on these grounds with no intervention from humans. They seem indifferent to safari-goers when people are respectful. One day, however, we spot the elusive leopard. Our guide, Peter Machuria, asks us to take a quick photo and drives away. Looking back, we spot nearly 15 safari vans circling the cat, which has retreated into the bush. "They cornered the leopard; so it can't hunt," says Machuria, shaking his retreated into the bush. "They cornered the leopard; so it can't hunt," says machuria, shaking his head. "That's not good for the animals." It's a sobering reminder that tourists must respect the park's fragile ecosystem in their enthusiasm to admire the wildlife.

Our third stop on the trip, in southwestern Kenya, is the Masai Mara National Reserve, which is part of the 9,700-square-mile Mara-Serengeti ecosystem that stretches south into Tanzania's Serengeti National Park. The Masai Mara and Serengeti are world-famous and house millions of Serengeti National Park. The Masai Mara and Serengeti are world-famous and house millions of animals, from elephants to the highly endangered white rhinos. In the 1970s and '80s, animals were often poached in the Masai Mara for their skins and furs, says Dennis Waweru, a safari guide were often poached in the Masai Mara for their skins and furs, says Dennis Waweru, a safari guide at the Mara Intrepids Camp, where we're staying. Fortunately, poaching has been down in the past decade thanks to more stringent government policies. Even Masai tribe warriors, who have lived on this land for generations, have, at the request of the Kenyan government, largely ended the tradition of killing lions.

Big and beautiful, the Masai Mara attracts scientists and tourists from the world over. Thanks to its large population of lions, cheetahs and leopards, Masai Mara is the setting for the ongoing BBC documentary "Big Cat Diary," which follows the park's felines. Researchers are studying the behavior of spotted hyenas on park grounds. Photographers come for the Great Migration, when nearly two million wildebeest and zebras walk from Tanzania's Serengeti National Park to the Mara. Everyone seems awed by herds of antelope, families of elephants and hundreds of brilliantly colored birds. Thanks to parks such as the Masai Mara – and dedicated conservationists who work there – these animals will be around to delight future generations.



A stately impala in Samburu National Preserve

Sunrise in the Masai Mara

An elephant mother and calf in the Masai Mara



On the Web:

From meeting conservationists to spotting cheetahs up close, Julia Kolker blogs and shares photos from her safari to Kenya. See zoosociety.org/africablog.

Travel With Us

The Zoological Society offers field trips in Wisconsin and Illinois as well as eco-themed trips abroad. Please see zoosociety.org/travel for details on current travel opportunities.

Just For Kids

Explore the African savanna, learn Swahili

Hippos at a waterhole in the Masai Mara



A Grevy's zebra in Samburu National Preserve



A topi (type of antelope) in the Masai Mara

They draw blood. They give shots. They deal with difficult patients. No, they're not nurses. They're veterinary technicians at the Milwaukee County Zoo. In veterinary medicine, techs wear many hats, says Dr. Roberta Wallace, the Zoo's senior veterinarian. Just ask Bob Korman. He's one of the Zoo's three vet technicians. His daily tasks range from monitoring anesthesia on a brown bear to analyzing fecal (poop) samples.

Each day starts with a plan, says Korman, who has worked at the Zoo for three years. For example, the veterinary team wanted to check the lung health of Jane, an older brown bear who was coughing. Korman and his vet tech co-workers, Margaret Michaels and Joan Maurer, prepared a day ahead. They set up equipment,

When Korman isn't helping treat animals, he's in the Zoo's Animal Health Center laboratory. The techs take turns performing tests and analyzing samples in the lab – a task that's not unlike playing detective. Lab tests of blood and fecal samples can reveal everything from internal parasites to anemia, a lack of red blood cells that can make animals weak and lethargic. When the vet techs aren't puzzling over a microscope, they may be developing X-rays, filling pharmaceutical prescriptions or performing nursing tasks such as treating lesions and giving animals medications.

Sounds like a lot? It is. In the past decade, veterinary technicians have gained a bigger role in animal healthcare, says Korman. Today, many veterinary technicians, including Korman, have a

> bachelor's degree in a field such as biology, are graduates of an accredited school of veterinary technology, pass a national exam to be certified, and even get additional training in a specialty. Joan Maurer, one of the Zoo's vet technicians, recently helped create a specialty academy for zoo vet technicians. The effort, also spearheaded by Bonnie Soule, a vet tech from Rhode Island, was recognized by the National Association of **Veterinary Technicians** of America.

The fast pace and the chance to treat a variety of animals keep techs devoted to the job, says Korman, a former zookeeper. He grew up caring for pet dogs, cats and fish. He completed an internship in wildlife rehabilitation at the Indianapolis

Zoo, did raptor rehab in Namibia (Africa), and was lead keeper at the Kangaroo Conservation Center in Georgia. And for years he worked as an emergency veterinary technician at a smallanimal clinic.

Korman and his colleagues share their skills with conservationists and researchers. In 2009, Korman participated in an international symposium on veterinary emergency and critical care. Maurer has presented many talks to the Association of Zoo Veterinary Technicians, and helped with a blood-cell study at the International Crane Foundation in Baraboo, Wis. Michaels, who has worked at the Zoo since 1986, helped Dr. Wallace study Humboldt penguins in Chile for 15 years. Thanks to their experience and enthusiasm, vet technicians are helping to develop standards for animal care - and saving wildlife.

Helping Hand for the Animals

went through a lengthy checklist of needed tools and improvised when necessary. For example, the Zoo doesn't own a ventilator big enough for the 500-pound bear. (A ventilator helps patients breathe when under anesthesia.) So Korman, an anesthesia specialist, pumped oxygen into a huge bag connected to the anesthesia machine and periodically "hugged" the bag to keep it pumping air into the bear's airway during the procedure. Afterward, he helped to sanitize medical equipment and restock the area.

veterinarians, Dr. Wallace and Dr. Vickie Clyde. With such technical support, these doctors can concentrate on tasks that only they are qualified to do, such as diagnosing illness, prescribing medicine and performing surgery. For example, Korman and Dr. Clyde worked together to prepare Amba the Amur tiger for a biopsy. The big cat had stopped eating last summer and was suspected of having liver disease as well as inflammatory bowel disease. Dr. Clyde oversaw anesthetizing the tiger in the big-cat building, transporting Amba to the Animal Health Center and working with visiting surgeon Dr. Keith Gunby to collect the biopsies. Korman hooked Amba to an IV catheter to give her fluids, collected stool and blood samples for testing, and monitored the anesthetized tiger's vital signs (temperature, heart rate, etc.) to keep her safe. The biopsies confirmed the diagnosis, and Amba was later successfully treated with steroid therapy and a modified diet.



Bob Korman holds Genghis, the Zoo's red panda, during a routine checkup.



"Everybody loves penguins. They're popular all over the world," says penguin scientist Dr. Alejandro Simeone. So when lots of dead penguins start washing up on beaches, it makes news.

That gave Dr. Simeone an idea. An ecology and natural resources professor at the University Andres Bello* in Santiago, Chile, he knew that penguin populations had steadily been declining. But why were large groups of penguins dying all at once? "There aren't many seabird research groups in my country. So we don't have ways to get accurate information on penguin deaths," he notes. The one place he could get details was from newspapers, even though the data might be incomplete or flawed. So he and his students decided to do an Internet search using Google. They looked at 44 newspaper Web sites and tracked their reports of penguin deaths for five years, 2005-2010. His study, which he reported on last September both at an international penguin conference in Boston and at the Milwaukee County Zoo, turned up some interesting clues:

- There were 1,908 bird deaths reported, but the bodies of the dead penguins normally were in good condition. That meant they probably weren't killed by illness.
- Usually large groups of penguins were washed up on a beach at the same time.
- The largest number of dead birds occurred in southern Chile -"exactly in the area where the majority of commercial fishing and fishery landings take place in our country."
- Most of the incidents took place during the southern hemisphere's fall and winter (March-August), when 85% of birds were killed. "That is the time when migration takes place," notes Dr. Simeone.

It wasn't hard to conclude that the birds were getting entangled in fishing nets and dying. In fact, says Dr. Simeone, "in March 2009, at least 1,380 birds washed up on the beach" in just one spot: Queule, a place in south-central Chile. A huge fishing effort was occurring there at the time. When the police or the national government confirms that birds are killed in commercialfishing nets, they do nothing because they say that the fisheries are not deliberately trying to kill the birds, says Dr. Simeone. So the companies have no incentive to change. That's a shame, he says, adding: "Most of the time there are very simple modifications that can be made to help, such as adding a stripe to the nets, which the penguins can see but the fish cannot."

BOUT PENGUINS



Dr. Alejandro Simeone visited Humboldt penguins at the Milwaukee County Zoo.

While Dr. Simeone has not been able to solve the fishing-net problem, he has spent more than 16 years studying Humboldt penguins to find ways to help them survive. In joint studies with the Milwaukee County Zoo, with ongoing support from the Zoological Society of Milwaukee, he has studied penguin ecology, done penguin censuses, and, in the latest project, installed artificial burrows in which penguins can nest. (Natural penguin nests often are destroyed by rains or erosion.) As of November 2010, 36 burrows had been installed, 3 were in use, another 4 showed signs of occupation, and, in spring 2010, 1 pair of penguins had laid eggs. "It takes awhile for penguins to accept the burrows," says Dr. Simeone. "It is a very nice feeling that you are doing something directly for the penguins. When you see a penguin using the nest and laying eggs that will hatch into chicks, it translates into penguin survival. You are giving

back to the penguin something that you took from her, such as the forest on the island that was logged and completely destroyed and now eroded. The hand of man was in the erosion."

When he was in Milwaukee, Dr. Simeone was asked why he chose to study birds and what advice he would give children about careers in science. "I lived near the coast as a child. Birds caught my attention more than other animals. They fly, they're beautifully colored, their living habits are interesting. Birds are also good indicators of the health of our ecosystem." He still recalls the first time he held a "peeping egg," an egg with a chick about to hatch. He heard a slight tap and a peeping noise. "When that shell starts to talk to you...that was absolutely amazing," he says. "People will say that you'll never make money in research and conservation. If you have a feeling for something, follow your instincts. Be persistent. Do well in school." He also recommends the Milwaukee County Zoo as a place to watch birds from other countries. "It's great that you can get so close to the birds. In the wild, you never get that close to Humboldt penguins."

By Paula Brookmire and Julia Kolker

Web: For more information on the long-term Humboldt penguin studies conducted by the Milwaukee County Zoo, Dr. Simeone and other Chilean researchers, go to zoosociety.org/penguinstudies.

Out Come the Cameras





A hippo here, a badger there, and everywhere a camera to catch the action. Photographing animals – and people – at the Zoo is great fun. And, wow, what a challenge! So say both the amateur and professional photographers who love the garden setting, the rare animals and even the photography hurdles at the Milwaukee County Zoo.

Just when you want a shot of those perky prairie dogs, they dive into a burrow. The darting Goeldi's monkeys hardly stop long enough for a picture. The snakes seem to do nothing but pose, but beware of your flash bouncing off the viewing window. Try to get cute mug shots of hippos Patti and Puddles at certain times of day, and all you'll see are their – dare we say it – big backsides. One animal, Tink the badger, was so often underground last summer that we posted a challenge on the

Zoological Society of Milwaukee (ZSM) Facebook page to see if people could get pictures of her. They did!

The rewards of animal photography at our Zoo have drawn one group in particular all the way from Illinois. Chicago's North Shore Camera Club made almost monthly visits to Milwaukee last year (some of their photos are displayed here). Member Ralph Durham, of Mundelein, Ill., praises the Zoo's design. "Many animals are close enough that you can easily photograph them without super telephoto equipment. Habitats are designed so that you can get images that don't look like you took them at a zoo. The grounds themselves are a wonderful place to shoot, a beautiful people-friendly environment where you can spend an hour or a day."











1. Exotic butterfly by Julie Cheng – She's practicing shooting butterflies elsewhere in preparation for our Zoo's summer 2011 exhibit Butterflies! In Living Color. 2. Endangered Aruba Island rattlesnake by Allen Davies – Tip: Look for patterns and texture. 3. Ralph Durham with camera by Bob Noble 4. Summer camp girls with grizzly by Julie Cheng – Tip: Have people turn toward the camera to get their face plus an animal in back. 5. Meerkat by Allen Davies – Tip: Get the animal in action, not just lying down. 6. Camel dad and calf by Allen Davies – Tip: Babies make cute pictures. 7. Hippo by Tom Pospiech – Tip: Capture funny moments.

Allen Davies, president of the North Shore Camera Club, adds that he has seen zoos around the world, and our Zoo stands out, partly because of animal exhibits that look like natural habitats. "But the main reason we like the Milwaukee County Zoo," he says, "is that we feel welcomed there. The people are what make it great." Davies, of Lake Forest, Ill., was impressed that the Zoological Society president, Dr. Bert Davis, came across their group at the Zoo one day last summer and took the time to talk with them.

Durham and Davies both like the shared experience of a group outing to the Zoo. "Someone will point out an animal that others have not seen," notes Davies, "and we share photographic tips." Speaking of tips, Davies has a few: "Serious photographers should think in terms of a digital SLR camera from Canon, Nikon, or one of the other manufacturers. Smaller cameras are getting better and better, but a little point-and-shoot will be disappointing if you want a large image – even an 8-by-10-inch print. It would be good to have a lens or lenses with a range of focal lengths. A zoom in the range of 100-400 mm would be ideal for long shots, but you need something in the 40-100 mm range to get up close to the smaller animals. A tripod is almost a necessity for some of the work – but it should not get in the way of other Zoo visitors."

For more tips on photographing animals at the Zoo, see pictures and captions on these pages. Also check out tips from the ZSM's longtime photographer, Richard Brodzeller, at www.zoosociety.org/phototips.

By Paula Brookmire

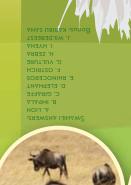
From far left previous page: a. Julie Cheng and Ralph Durham by Paula Brookmire - Tip: Close-ups of people are more appealing than too much background. b. Humboldt penguin by Julie Cheng - Tip: Dark against light makes a nice contrast. c. Camera buffs by Richard Brodzeller - Tip: A line of people can be interesting as long as there's a focal point in the foreground (big camera). d. Tink the badger by Robert Noble - Tip: Be patient and wait for just the right pose. e. Elephant skin by Ralph Durham - Tip: You don't need the whole animal. Just a tail or an eye or wonderfully textured skin can captivate.



Kids Aliue

Look out! Behind you! It isn't easy living on the African savanna. You never know what dangerous creatures might be creeping close by. Animals on this flat grassland must share their home with other wildlife - even enemies! For example, all animals need water. So, predators such as lions and prey such as zebras may use the same waterhole. To protect themselves, many prey animals travel in groups. They find safety in numbers. They also avoid risky waterholes where lions may be hiding. Each animal plays an important role in the cycle of life. Zebras eat the grass; lions eat the zebras; lions poop and dung beetles break up the poop to go back into the earth.

Kids, take a spin through the savanna with the activities on these pages. Count hippos in a hippo pool, learn Swahili, and help a baby wildebeest find its way to safety. But be careful. A predator could pop out at anytime!



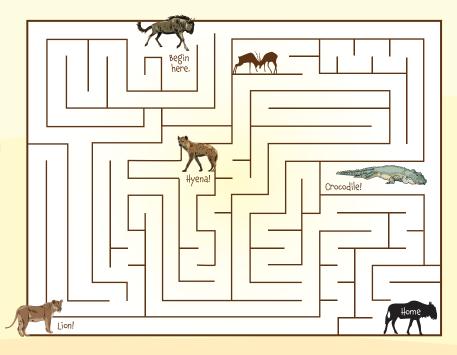


SHARING

SAVANNA MAZE: Help the wildebeest home!

From lions to hyenas to crocodiles, wildebeests have lots of predators on the savanna. Every year, millions of Africa's wildebeests walk over 600 miles. They travel from Tanzania's Serengeti National Park to Kenya's Masai Mara National Reserve. This is called the Great Migration. Help the baby wildebeest make the trip, escape predators and find its way to its mother. Use a pencil to trace its route through the maze.

For more photos of African savanna animals, see pages 6 and 7.



TAKE A SWING AT SWAHILI!

Learn a new language. Swahili is one of many languages spoken in Africa. Translate each Swahili animal name into English using the clues in each sentence. To hear animal names in Swahili go to www.zoosociety.org/Swahili.

3		Ğ	, 0,
A crouching (a) SIMBA	_ pounced on a B SWALA PALA	drinking from	a nearby waterhole.
A tall © TWIGA stre	ched its long neck to eat from an aca	cia tree. A 🖸 TEMBO	trumpeted
as it crossed paths with a large h	norned (3 KITARU grazing	g on the grassland. A 🦸	MBUNI
	ng across the savanna on its long legs		The state of the s
down to finish off the remains of	f a striped 🕕 PUNDA MILIA	A stealthy ① FISI	went
searching for the carcass of a 0	NYUMBU (or gnu).		
BONUS: Use the numbered lette	ers 1-10 (see above) to translate a usef	ul phrase into Swahili.	
"You're welcome" -		40	Animals of the savanna: hyena, rhinoceros, lion, impala, elephant, vulture, ostrich, zebra, wildebeest, giraffe

HIPPO POOL PARTY

Hippos spend almost their entire lives in water. Just about everything they do except for eating - takes place in a river, lake or mud bank. In times of drought, hippos crowd into any body of water they can find. You might see hundreds of hippos jam-packed together at once! Check out the hippo pool party at right. How many hippos can you count? You may see just their eyes or ears. Write down your number, and then check the answer (tucked in somewhere on these pages).





Rhinoceros

Breeding update Pachyderm Mall

For a rhinoceros mom, it's normal to have a fetus growing inside her for 15 months. It can take even longer for a rhino to get pregnant. Dana Nicholson, pachyderm area supervisor at the Milwaukee County Zoo, can attest to that. He and his staff have been trying to create the right conditions for pregnancy for a few years. The Zoo has two aging rhinos: Mimi, 24, and Brewster, 26. "They're both healthy," says Nicholson. And since they both came to the U.S. from the wild in Zimbabwe, their genes are invaluable to creating a genetically diverse population of rhinos in zoos. That's important because the black rhino is an endangered species. "Brewster and Mimi are ranked fourth most important genetically in the 24 founder (original) animals in U.S. and Australian zoos. So we're making a concerted effort to make something happen." That includes tracking Mimi's estrus cycles - and Brewster's reaction to them. "When the male gets frisky and very amorous, then we put them together - for a limited time. We had to literally watch them every moment when we first introduced them a few years ago. Their courtship sometimes can be violent. Now they're more compatible," says Nicholson. Rhinos are large, to say the least; Brewster weighs 2,600 pounds, and Mimi weighs 2,300. "When they breed, you hear it. The mounting lasts 30 to 40 minutes." Mimi's estrus cycles were more regular in 2010, compared to 2009. "We had three breedings last summer, the last on July 9. We have to wait three to four months after the last breeding to check fecal samples because the progesterone can't be measured till then." The level of progesterone (a hormone) indicates whether Mimi's pregnant. By late November the tests revealed that Mimi indeed was not pregnant. So they'll have to wait till April to try again, says Nicholson. Courtship can include "cat and mouse running" in the yard, and there's not enough space for the rhinos to breed indoors. It has to be above 45 degrees and dry for these African mammals to go outside. If Mimi gets pregnant in April, she won't deliver till summer 2012. In the wild, the calves have to stand soon after birth, says Nicholson, adding, wryly, "So they have to cook a long time."





Tayra

Arrived: July 10, 2010 Small Mammals Building Janeiro isn't like most other male tayras. "He's very people-friendly," says Rhonda Crenshaw, area supervi-

sor of the Small Mammals Building at the Milwaukee County Zoo. "Our males have always been very leery of people in general, but he loves to come and see what we're doing." The 1-year-old tayra from the Papiliorama Swiss Tropical Gardens in Kerzers, Switzerland, can't quite contain his elation here at the Zoo. Perhaps it's the generous portions of raw meat, vegetables, fruits and especially bananas he receives or maybe even his blossoming friendship with the Zoo's female tayra, Andrea. The two have progressed from avoiding each other altogether to relaxing near each other on branches and in a plastic box suspended from the ceiling. "It's their favorite spot," Crenshaw says. "It's the highest point in the exhibit where they can lay down and rest." To introduce the two weasel-like mammals, zookeepers brought them

to the Animal Health Center, where they had more space and could be separated quickly if they had a conflict. So far both Janeiro and Andrea, 6, are as compatible and lively as tayras ought to be. "They're very active," Crenshaw says. "They love to climb and jump. They use the entire exhibit." Tayras are known for their agility as well as their numerous vocalizations. They squeal when frightened, scream when fighting and huff when nervous. The diurnal critters live in the forests of southern Mexico, Central America, South America and Trinidad. While their population remains stable, they are dwindling in Mexico due to deforestation and farming. To tell the difference between them, look for Janeiro's dark, thick fur against Andrea's lighter-colored head. Janeiro is also slightly bigger, weighing about 13 pounds, while Andrea is just over 8 pounds. When the new mating season for tayras starts in spring, zookeepers hope to see the two breed.



Alive Winter 2011 15

Rhinoceros hornbill

Arrived: February 15, 2010 Borneo Exhibit

Red-billed hornbill

Hatched: June 14-16, 2010 Kopje Exhibit & Termite Mound Exhibit (both in middle of the aviary)

(west end of Herb & Nada Mahler Family Aviary) (both in middle of the aviary) Some birds have colorful feathers; others have colorful bills. Meet three un-"bill"-lievable bird species at the Milwaukee County Zoo: rhinoceros hornbills, red-billed hornbills and a southern ground hornbill. The Zoo's latest arrival is Victor the rhino hornbill, who came here as a companion to the resident female, Vianna. This hornbill species is famous for large, red-and-orange bills and casques (banana-shaped plates on top of their beaks). Victor and Vianna were introduced gradually for two months before they began sharing an exhibit. "The courtship and bonding of these birds are critical," says aviary keeper Bryan Kwiatkowski, who hopes Victor and Vianna will breed in the future. "The female must trust the male to provide her with everything when she is incubating and raising chicks." In their native Southeast Asia, the female rhino hornbill seals herself in a tree cavity with scraps, dung and mud. The male provides food through a small opening while the female incubates eggs inside the cavity. Once the eggs hatch, the male must provide food for the family while the mother bird cares for the young. When the chicks are fairly large and eating well, the female might leave the nest. The parents then reseal the cavity and continue to feed the chicks together until the young birds are ready to fledge. This behavior is common to most hornbill species, including the three red-billed hornbills that hatched at the Zoo last June. The mom sealed herself in a nest for four weeks right on exhibit, says Kwiatkowski. The parents, Sasha and Dillan, are in the Termite Mound Exhibit, and one of the now full-grown chicks is next door in the aviary's Kopje Exhibit (kopje is a type of rocky hill). The other two chicks, Echo and Luna, are off exhibit. Native to sub-Saharan Africa, red-billed hornbills have bright red beaks and long eyelashes. Our Zoo also has a southern ground hornbill called Hornrietta. Found throughout Africa, this 3-to-4-foot-tall bird is the largest of all hornbill species, which is rapidly declining in the wild, and is considered critically endangered in southern Africa. At the Zoo, you can see Hornrietta, who turns 30 this year, in the African savanna yard starting in mid-April. She's notable for her bright red eye patch and "chin" (see photo at bottom). Rhinoceros hornbills Red-billed hornbill (southern ground hornbill)

Help us make something 66 AT the 72 0 0 0



Give Belle the Dairy Cow a facelift and a technical makeover. Belle is the fiberglass Holstein cow in the Milwaukee County Zoo's dairy barn. This popular cow has a belly of a story to tell about how milk is made. But she needs updating.

Give to the Zoological Society's Annual Appeal for the Dairy Complex and Zoo Support and you'll help us:

- Give Belle the Dairy Cow a facelift and a technical makeover.
- · Add a new interactive program for young children
- Add THREE new "MOO" vies to the dairy barn theater
- Support more projects at the Milwaukee County Zoo

Please, please donate some





Belle the Dairy Cow in 2010

Contact us in whatever way "MOO"ves you:

- Use the flyer inserted with this Alive.
- Make a secure donation online at www.zoosociety.org/appeal.
- Call us anytime at (414) 258-2333.
- Visit the Society offices or Guest Services desk when you visit the Zoo.