Inside · Kids & Koalas · Conservation in the Congo Ape Ultrasounds Make Waves Annual Report An insider magazine for members of the Zoological Society of Milwaukee Spring/Summer 2007



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.

2006-2007 BOARD OF DIRECTORS

Directors

Bob Anger Paul Cadorin Michael G. Carter R. Thomas Dempsey Richard Glaisner Michael M. Grebe, Jr. Eli Guzniczak Dr. Leander R. Jennings Michael T. Jones Bonnie Joseph Henry Karbiner Karen Peck Katz Kenneth Kerznar Maria Gonzalez Knavel Ioe Kresl James Kuehn Chris Leutner** Quinn Martin Jack McKeithan James McKenna Kat Morrow Joel Nettesheim Jill Grootemat Pelisek Gina Alberts Peter

Richard J. Podell
Joan Prince, Ph.D.
James C. Rowe
John Sapp*
Barry Sattell
Andrew T. Sawyer, Jr.
Richard Schmidt
Katherine Hust Schrank
Judy Holz Stathas
Rich Tennessen
Karl Theile
Mrs. Robert A. Uihlein, Jr.
Gregory Wesley
Jane Wierzba
Ray Wilson**

Honorary Directors
William J. Abraham, Jr.
John B. Burns
William M. Chester, Jr.
Stephen M. Dearholt
Thomas B. Fifield
Richard A. Gallun
Richard D. Gebhardt

** Associate Board President

Edward A. Grede John A. Hazelwood Robert A. Kahlor Ann McNeer Sandi Moomey William G. Moomey Jeff Neuenschwander Philip W. Orth, Jr. Frederick L. Ott Bernard L Peck **Jack Recht** Kurt W. Remus, Jr. A.D. Robertson Jay Robertson James A. Taylor John W. Taylor Allen W. Williams, Jr. Paul Wong William C. Wright Bernard C. Ziegler III

President Emeritus Dr. Gil Boese

*** Zoo Pride President

2006-2007 ASSOCIATE BOARD

Directors

* Chair of the Board

Anthony Baish Marquette Baylor Bill Bussler Matthew D'Attilio Jennifer Fahey Darryll Fortune Joseph Frohna Joe Kresl Julie Kubasa George Justice Karen Loth Kim Magnabosco Margie Paur Mary Catherine Poker Scott Schueller Randy Scoville Tricia Shinners

Billie Jean Smith Chad Taylor Brookellen Teuber Kathleen Toohey Peter Underwood Ken Wein Ray Wilson*

Honorary Directors
Bob Anger
David Batten
Lori Bechthold
Nora Dreske
John Fleckenstein
Mike Fox
Linda Grunau
Eli Guzniczak

Katie Harding

Lee Walther Kordus Peter Kordus Ouinn Martin Kat Morrow Richard J. Podell Bunny Raasch-Hooten Arlene Remsik Barry Sattell Dan Schwabe Judy Holz Stathas John Steiner Jeff Steren David Strelitz James Szymanski Iane Wierzba

* Associate Board President

2006-2007 ZOO PRIDE BOARD

Directors

Jane Austin Kaye Lynne Carpenter

tin Kay Elsen nne Joan Kalinoski ter Chris Leutner* Joyce Diliberti Diane Tyk Steve Uebelacker

* Zoo Pride President

ZOOLOGICAL SOCIETY MANAGEMENT STAFF

President/CEO
Dr. Robert M. Davis
Communications,

Marketing & Membership Robin Higgins, Vice President **Development**Beth W. Carona,
Vice President

Finance/Human Resources
Judy Treinen,
Vice President

Creative Marcia T. Sinner, Director

EducationJames Mills,
Interim Director

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

Editor Paula Brookmire

Alive Writers Kristina Allen Julia Kolker **Graphic Designer** Roberta L. Weldon Photographer
Richard Brodzeller
(unless otherwise noted)

Printer NML Graphics



CEO's Letter

In this ever-shrinking world where all living species are interconnected, the idea that saving a species in one habitat makes a difference all across the globe is gaining wide acceptance. Zoos, aquariums and zoological societies realized this many years ago, when zoos stopped being just entertainment parks and took on the broader role of saving animals in the wild and becoming havens for animals that no longer were safe in the wild. The Association of Zoos and Aquariums, in fact, requires that a zoo exhibiting endangered species help conserve endangered animals in their native habitats. In the public-private partnership that the Zoological Society of Milwaukee (ZSM) has with Milwaukee County, the ZSM funds conservation field research that



Dr. Bert Davis reminds you to "get in the swim" this summer and visit Sting Ray & Shark Reef, sponsored by Chase. See page 10.

helps the Zoo maintain its accreditation with AZA.

A case in point is our successful Bonobo and Congo Biodiversity Initiative. This program to save bonobos (endangered great apes) in Africa's Democratic Republic of Congo also helps the 21 bonobos on exhibit here at the Zoo. Every species needs a critical number of members to maintain a viable population or it will go extinct. While no one knows just how many bonobos still live in the forests of the Congo (the only place on Earth where bonobos exist in the wild), we know that wild bonobos are threatened by poachers. The ZSM's antipoaching patrols in Congo and our efforts to survey the bonobo population there may mean that the Zoo's bonobos won't be among the last of their kind.

So how does this project affect you and me here in Wisconsin? As our stories on pages 4 through 6 in this issue demonstrate, bonobos and humans are closely connected. We share nearly 99% of the same DNA, including a genetic sequence related to bonding and empathy (see the public TV NOVA program called "The Last Great Ape"). What we learn about bonobos in captivity and in the African rain forests may benefit human health as well as our understanding of human development.

The human factor has become so important in our efforts to save bonobos that we have built schools for the children of the villages around the ZSM research station in Congo. We've also provided literacy training for adults and, just this year, agricultural training and tools. Like TV star Oprah Winfrey, who built a school in South Africa, and basketball star Dikembe Mutombo, who built a hospital in Congo, we believe that you need to start with the immediate needs of the indigenous people in Africa if you're going to help both people and animals. For a more detailed story of our work in Congo as well as the terrific efforts Zoo staff have made with bonobos at our Zoo, read the 2007 book Bonobos: Encounters in Empathy (see page 5).

Conservation, education, our support of the Zoo – you'll find a summary of what we're doing on all these fronts in our annual report, included in this Alive starting on page 14. We're making the world a better place, one person – and one animal – at a time.

Dr. Bert Davis

Chief Executive Officer



SPRING/SUMMER · April-September 2007

Volume 27, Issue 2

4 Conservation: Congo Efforts Help Apes & People

Zoological Society projects in Africa expand from conserving apes to helping people, including literacy and agriculture training.

6 Ultrasounds Save Animals

Pregnant apes get ultrasounds, too. How this technology keeps animals healthy.

8 On the Job: Reptile Rescuer

Think snakes are scary? Think again! Why endangered reptiles are worth conserving. 9 Education: Teachers Who Bring Variety The Zoological Society uses outside teachers to bring different perspectives to classes.

10 Summer Special Exhibits

Get the scoop on two summer exhibits at the Zoo featuring sting rays, sharks and koalas.

11 What's Gnu

Ruth, a new African elephant, and a baby black tree monitor (lizard).

KIDS ALIVE

12-13 Koala games and fun facts

ON THE COVER: Koala (see pages 10-12)

CONTRIBUTORS

See an insert packaged with this Alive that includes a list of Serengeti Circle members and a list of Capital Campaign donors of \$1,000 or more.

[Travel: Africa]

Do you dream of seeing leopards, elephants and zebras in the wild? You're in luck. The Zoological Society of Milwaukee (ZSM) is launching a joint travel program with the Milwaukee County Zoo that will offer safaris to places such as Africa, Belize, Costa Rica, the Galapagos, and Thailand. The program kicks off with an African safari to Kenya Aug. 4-17, 2007, led by Zoo Director Chuck Wikenhauser. The safari provides excellent chances for wildlife viewing at reserves such as Masai Mara, Samburu and Amboseli. Travelers also can enjoy talks by leading conservationists and naturalists. The price, based on double occupancy, is \$7,895 per person. An optional, seven-day excursion to Tanzania (including the Ngorongoro Crater) will be offered immediately following the Kenya

Stock photography

safari, at \$3,395 per person, double occupancy. Call (414) 258-2333 for more information.

The ZSM also will offer shorter trips, including whale or polar-bear-watching excursions, nature observation in the Florida Everglades, and urban safaris in U.S. cities with top-notch zoos, such as San Diego. Participants will be accompanied by Zoo or Zoological Society staff who can share information about animals and their habitats, making each journey a fascinating experience. Most trips will include exceptional accommodations; some experiences, however, will be more adventuresome and rugged.

Congo Efforts Help Apes & People

When she first met Isomana Edmond about seven years ago, Dr. Gay E. Reinartz was impressed with his skills in the rain forest: tracking animals and identifying plants. "He knows at least 400 species of trees, and can track bonobos in the densest rain forest," she said. "Yet he was handicapped by his inability to read or write. Sadly, the jobs he received as a park guard were menial, and his vast indigenous knowledge was difficult to tap." Through his work for the Zoological Society, he learned first how to read a compass. That earned him a lot of respect among his peers. "His greatest contribution," said Dr. Reinartz, "is that he is unsurpassed in his ability to find bonobos and understand their behav-

ior in the forest. In this sense, he has contributed significantly to our success in conserving bonobos in Congo."

Edmond is the longest term Congolese employee of the Zoological Society of Milwaukee (ZSM). He also is an example of positive things that can happen when a conservation organization gets involved in field work to protect an endangered species. Ten years ago the ZSM sent researchers into the world's second largest rain forest, in the Democratic Republic of Congo, with the intention of surveying the area for bonobos, endangered great apes. Dr. Reinartz - who is the ZSM's conservation coordinator has directed the program since its inception in 1997. The researchers began documenting evidence of bonobos in Salonga National Park, a park that was set aside to protect bonobos and forest elephants. Some skeptics said bonobos didn't even exist in the park. Evidence collected by Dr. Reinartz and the ZSM team over the last 10 years - everything from footprints to photos has proven that bonobos indeed live in the forests of the Salonga. Other accomplishments include building Etate, the ZSM research station in Salonga that was converted from a poaching camp, and



developing a suite of projects in Salonga known collectively as the Bonobo and Congo Biodiversity Initiative (BCBI).

At a January 11, 2007, celebration at the Milwaukee County Zoo of a decade of work in Congo, ZSM CEO Dr. Bert Davis said: "For 10 years Dr. Reinartz and her colleagues have ventured into the heart of Africa, braving bugs, heat and thick rain forest to help conserve and protect the bonobo." Along the way, the project expanded from helping apes to helping people: the Salonga park guards and the population from local villages surrounding the park.

"Dr. Gay Reinartz realized that she needed to build relationships with the Congolese," said Dr. Gil Boese, ZSM president emeritus and president of the Foundation for Wildlife Conservation, Inc., which manages funds for some of the ZSM's projects in the Congo. "She has helped them develop a vested interest in conservation by giving them jobs and job training. She has worked on many fronts. We built a research station with shelter for the staff. We have supported and built local schools. We have provided basic

supplies. Gay Reinartz has built up trust with village leaders. All of these things needed to be done just to succeed with basic conservation projects. These programs do not succeed unless people experience direct benefits."

Among the projects the ZSM initiated or supported are anti-poaching patrols along the Yenge and Salonga Rivers, and around Etate; paramilitary training for Salonga Park guards; and delivery of salaries (during the years of Congo's civil war) to guards who had not been paid for years. "We've worked with the regional military authorities to help provide training and

reinforce the guards' presence in the park," said Dr. Reinartz. "As part of the park's anti-poaching program, we provided two park stations with pirogues (dugout-canoe-style boats), outboard motors, and fuel to form mobile anti-poaching patrols. In the first six months after getting the pirogue, the guards at one station confiscated over 3,500 metallic and 2,500 nylon snares. To augment the meager guard force, we have hired 21 supplementary guards. As a result, eight renegade military poachers have been arrested in the last two years." The ZSM also has provided Etate, a strategic patrol post as well as research station, with a short-wave radio, solar panels and research equipment. All supplies have to be carried into Etate by pirogue because there are no major roads into Salonga, and the only airport is a four-day walk from the research station.

Upon arriving in Salonga, you enter an area of great beauty and also extreme poverty. "Where you have poverty, you have poaching," said Reinartz. "About 60% of the protein the local people eat comes from wild animals.

For villages surrounding Salonga, this often leads to poaching in the park." So the ZSM has embarked on yet another way to help bonobos and people at the same time: forming an agricultural cooperative. With funds from a selfhelp grant from the U.S. Embassy in Kinshasa (capital of the Democratic Republic of Congo), the ZSM is providing farming implements, seeds and agricultural training to villages around Etate. The ZSM engages an agriculture consultant, Homère Madjolokela, to teach people in six villages

how to grow crops that can be sold to major markets. Planting was to start in February when Dr. Reinartz and her team returned to Salonga.

Bonobo Book Now Available

Learn more about Dr. Gay E. Reinartz's efforts in the Congo as well as her work as coordinator of the Association of Zoos & Aquariums' Bonobo Species Survival Plan. Order the book Bonobos: Encounters in Empathy, written and donated to the Zoological Society of Milwaukee (ZSM) by Jo Sandin, a retired Milwaukee Journal Sentinel writer. She also provides a fascinating look at the Milwaukee County Zoo's group of 21 bonobos, the world's largest group of bonobos in a zoo environment. The book costs \$22 plus tax and shipping. For more information, see the form in the issue of Wild Things newsletter packaged with this Alive or go online at www.zoosociety.org. Book proceeds benefit the Zoo's bonobos and the ZSM's bonobo efforts in Africa.

> An interesting part of the project is the role that women play. "One condition for providing agricultural materials and training is that women, who do most of the work in the field, be part of the decision-making process for the agricultural cooperative," said Dr. Reinartz. Women normally are not part of local management committees.

Literacy training for adults and education for children is another way the ZSM is getting the Congolese invested in conservation. "We have built four schools, hired teachers and provided teaching materials," said Dr. Reinartz. "When you ask the people what they want, it's health care and education for their families. In the region of Etate there is an 80% illiteracy rate. Most of the park guards cannot read nor write. Isomana Edmond's illiteracy was his main frustration. Edmond was the one who suggested that we teach the park guards to read and write. Last year the ZSM hired a tutor for the Etate patrol post, and within six months the guards could, remarkably, read their country's new constitution."

Edmond himself has learned to write. Dr. Reinartz, speaking at the Jan. 11 program to BCBI supporters, projected a picture on a screen of a proud Edmond and a letter written in his own hand-writing. It was a one-page letter to his wife.

-By Paula Brookmire

Isomana Edmond has learned to read and to use a Global Positioning System unit through the Zoological Society of Milwaukee (ZSM).



Ultrasounds Save Animals

Kosana, one of the Milwaukee County Zoo's bonobos, was three months pregnant. The 20-year-old great ape had a history of giving birth to premature babies before she came to the Zoo. So Barbara Bell, the Zoo's main bonobo zookeeper, brought in Leann Beehler, an ultrasound technician, to follow Kosana's pregnancy with scans. "Late in the pregnancy, we saw that Kosana's placenta was deteriorating," says Beehler. "We knew to expect something other than a normal birth." A deteriorating placenta cannot effectively carry oxygen and nutrients to the fetus. This can lead to underweight babies, among other disorders. Kosana's baby, Deidre, weighed very little when born in March 2003 and grew too slowly in her first weeks. Beehler and Bell consulted a lactation expert, who advised giving

Leann Beehler does an ultrasound on an anesthetized gorilla named Linda, whose face is covered by a plastic container custom made into an anesthesia mask. Photo by Zoo Staff

Kosana food supplements to increase her breast milk. Today, both mother and child are strong and healthy.

A licensed practical nurse, Beehler owned a mobile ultrasound business, Medical Care Specialists, Inc., when Bell recruited her to volunteer her services 11 years ago. Beehler brought ultrasound equipment to the Zoo in a van and performed scans on animals as diverse as Vietnamese flying snakes, tigers, wolves, goats and bats. "It was a unique way to branch off and develop expertise in the animal area," says Beehler,

Beehler's skills and equipment were crucial to researching the health of great apes such as gorillas, orangutans and the highly endangered bonobos. She also helped recruit ultrasound technicians with obstetrical experience to do scans of pregnant bonobos. As a result, the Zoo has the best database of ultrasounds of

pregnant bonobos in the world. Beehler has worked with Bell, Zoo veterinarians, bonobo keepers and outside specialists on several papers describing the Zoo's findings on bonobo health. "This research can be used by other zoos, and we need to save every bonobo we can," says Beehler. Adds Bell: "Without Leann's dedication to bonobo research, the Zoo would not have obtained cardiac research and biological data on all the great apes. It is truly a historical landmark." In fall 2006, 4D bonobo ultrasounds filmed by Beehler and Dr. Thomas Hildebrandt, an animal ultrasound specialist, received national attention when they were featured in National Geographic's "In the Womb: Animals" documentary (see box).

Beehler's work is also notable because some

animals, including the bonobos, are not anesthetized for ultrasounds. "We believe we were the first zoo to do cardiac scans on gorillas and orangutans where the animals are awake, aware, unrestrained and unstressed," says Beehler. Subjecting an animal to a medical procedure requires her to gain trust. Beehler visited the orangutans twice a week for three months before they would allow her to perform an ultrasound.

The bonobos were much more receptive. "Bonobos like attention," says Beehler. She sometimes spots a dozen bonobos watching and competing for attention when she is performing a scan. Despite the great apes' enthusiasm for ultrasounds, scanning them can be tricky. The animals are trained to accept health monitoring and to present their stomachs and chests. Their enclosures, however, are located above the zookeeper area in the basement of the Apes of Africa building. So Beehler must reach

up thorough the mesh with her equipment while looking at eye-level computer images (see photo at right).

Despite time constraints and technical challenges, Beehler and Zoo staff regularly perform ultrasounds on healthy animals to establish what is normal for each species. For example, Beehler runs cardiac ultrasounds on bonobos annually. "Great apes like bonobos have high rates of cardiac disease," says Beehler. "Ultrasounds collect very critical data to help this species survive."

In fall 2005, zookeepers noticed that Lody, normally the alpha male in the Zoo's bonobo group, began hanging back and got tired quickly. An ultrasound revealed that Lody had an enlarged heart, which caused his lethargy. The great ape was put on cardiac medication and was monitored by a cardiologist from the Wisconsin Heart

Hospital. Today, 1½ years later, Lody is nearly back to his old self. Zookeepers all over the world noticed that while male bonobos frequently have heart problems, the females rarely do. The Zoo





has the best database of cardiac bonobo ultrasounds in the world. Beehler hopes that ultrasound data and academic research on this topic will lead to ways to help treat and prevent bonobo heart problems. Beehler is often amazed by the similarities between bonobos and humans. Bonobos share almost 99% of the same genetic makeup with humans,

$In^{\it the}_{\it Womb}$

Ana Neema, one of the

Zoo's bonobos, got a taste of fame when ultrasound images of the pregnant great ape were featured in National Geographic's "In the Womb: Animals" documentary in fall 2006. Leann Beehler and Dr. Thomas Hildebrandt, an animal ultrasound specialist, supplied 4D footage and data for the documentary. The program uses ultrasounds, graphics, and visual effects to explore animal pregnancies, including those of dogs, elephants and dolphins. "I thought this program was amazing and I learned a lot," says Beehler. To learn more about this documentary, go online at http://shop.nationalgeographic.com/.

and they look and act like people more than other apes. They get many of the same diseases (such as the flu) and are treated with the same medications. When Linda, a bonobo, was diagnosed with diabetes, zookeepers administered treatment that a human of Linda's size and weight would receive for diabetes. Bonobos' internal organs, including the uterus, placenta and umbilical cord, closely resemble those of humans. Beehler once showed a pelvic ultrasound of a female bonobo to a radiologist. He read it as a normal human ultrasound. "Nothing was different and he was amazed!" says Beehler.

The opportunity to learn more about bonobos and other animals brings Beehler to volunteer at the Zoo several times a week doing ultrasounds. For her volunteer work, she has been designated a member of the Platypus Society, the Zoological Society's highest level donor-recognition group. "I enjoy working with animals because they seem so dependent on us," she says. "They make me feel special when they accept me."

-By Julia Kolker

Baby Deidre, born underweight, now is healthy and plays with her mom, Kosana. Photo by Richard Brodzeller

Reptile+Rescuer

their native habitat. This project is challenging not only because these dark-colored, reclusive reptiles are notoriously hard to spot, but also because their population may have dwindled to only a few

in southern Wisconsin. "I have not yet captured any massasaugas," says Pappas. "I'm not sure if they exist here in any sizeable population."

Chad Pappas spends much of his free time in the spring, summer and fall looking for snakes. Come April, Pappas can be found walking through the fields and marshes of southeastern Wisconsin, on alert for, say, the Butler's garter snake or the endangered, venomous eastern massasauga rattlesnake. Pappas, a zookeeper in the Aquatic & Reptile Center (ARC) at the Milwaukee County Zoo, has been doing field research on endangered and threatened Wisconsin snakes for several years. Juggling as many as four projects for the Department of Natural Resources, where he volunteers and does contract work, helps him at the Zoo, he says. "Learning about snakes' behavior in the wild helps zookeepers better care for snakes in captivity." It also helps save snakes that are swiftly disappearing from their native Wisconsin habitats.

While snakes give some people the shivers and others the urge to destroy them, Pappas says that snakes – even venomous ones – are beneficial to humans. Snakes eat rats, mice and other pests. They also serve as food for bigger animals and keep the ecosystem in balance. Snakes' venom is used in many medications, including those for heart disease, cancer, diabetes and multiple sclerosis.

The eastern massasauga rattlesnake, found in Canada, the Midwest, and the eastern United States, used to be hunted in great numbers for a bounty. Development and drainage of open prairies and wetlands for farming reduced

its habitat. In 1975, this snake made it onto Wisconsin's endangered species

list. Today, scientists estimate that less than 1% of the massasauga's previous population exists in the state. Pappas' goal is to learn how many snakes are still found in the wild, and where. He plans to capture snakes in the wild and fit them with a microchip for easy identification before releasing them back into



Pappas holds a common garter snake that he found in a southeastern Wisconsin field. Photo provided by Chad Pappas

Pappas has had more luck with the eastern plains garter snake and the Butler's garter snake. The two snakes look a lot alike: black or brown with light yellow stripes. Some scientists suspect that they share more than coloring in common. Says Pappas: "My goal is to collect data so scientists can learn how similar the DNA of these snakes is in comparison. Data show that there's an area where the two species are hybridizing and possibly forming a new species."

A hybrid is the scientific term for interbreeding between two animals from different species. Pappas collects DNA samples from eastern plains garter snakes by clipping off 2 mm of their tails and preserving the samples in alcohol. While it is too early to tell if the two snakes have formed a new species, this finding has interesting implications for the threatened Butler's garter snake.

Last year, this reptile nearly lost its status as a threatened species in Wisconsin. A legislative committee eventually voted to keep the snake a protected species at this time; nevertheless, its habitat is rapidly declining. This snake is important because it may have its own status as a sub-species. "Some genetic analysis indicates that this population is different than the population found in Michigan, where its closest relative would be," says Craig Berg, curator of the ARC. "Someday, this snake could be known as the Wisconsin garter snake or the Milwaukee garter snake. This may be the only place in the world where this particular snake is found. It may even become a tourist attraction for snake enthusiasts."

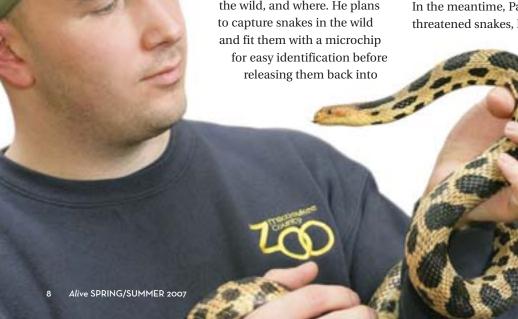
In the meantime, Pappas will keep studying endangered and threatened snakes, he says. "It's amazing to learn about an animal so unlike what we are." In fact, these some-

times-mysterious reptiles are like no other animal he works with (such as fish, amphibians, spiders).

"Snakes are part of the world and the food web," says Pappas. "They deserve to live, too."

-By Julia Kolker

Chad Pappas holds a fox snake, a non-venomous reptile that he comes across occasionally in southeastern Wisconsin while looking for garter snakes. The fox snake sometimes is on exhibit in the snakes of Wisconsin area of the Zoo's Aquatic & Reptile Center. Photo by Richard Brodzeller



Teachers Who Bring Variety Education



Have you ever made a house with chicken feet? A popular character in Russian folktales is Baba Yaga, a Russian witch. Baba Yaga lives in a house standing on chicken feet that walk and spin around! Children drew Baba Yaga's house while their parents crafted chicken feet for the house from pipe-stem cleaners. The combined results were part of a February family education class at the Zoo called

Arts and Animals of Russia taught by Mary Tooley. A part-time instructor for the Zoological Society of Milwaukee (ZSM) for six years, Tooley likes to make classes fun for both kids and adults. Family programs are designed to encourage adults and children to work together on projects and activities. "I teach art that the kids love while the parents have a little fun, too."

Tooley brings a different perspective and specialized skills to her "Art in a Suitcase" classes, as she calls them (because she totes her props and

supplies in a suitcase). "Incorporating art into education classes is a way to reach many children," says Tooley. Children learn in different ways, some by seeing, some by doing, and some by hearing. All ZSM education classes use a variety of teaching techniques so they reach children with different learning styles. Tooley uses hands-on art projects, folk art such as toy bears that children can see and touch, and animal facts and stories that inspire art. Since the ages of children in family classes range from 4 to 10, these classes offer projects for various skill levels. In Tooley's class, children can draw a Russian bear, or they can focus more on designing an elaborate, Russian-style picture frame with lots

Teachers!

Are you interested in teaching at the Zoo part time? To learn about Zoological Society part-time instructor positions, visit our Web site at www.zoosociety.org/teach or call (414) 258-5058, ext. 419.

of squiggles and curlicues (easy for younger children but also challenging for 10-year-olds).

Like all of the Zoological Society's family education programs, Tooley's classes integrate art and science. Both artists and scientists ask similar questions, such as: How big is a bear? Is a brown bear



Doug Koehler (left) of Waukesha watches his daughters (seated from left) Erin, 6, and Natalie, 10, decorate picture frames with elaborate Russian designs at a Zoological Society Art and Animals of Russia class. Ruby Diezel (standing) views examples of Russian art held up by instructor Mary Tooley.

always brown? The scientist needs the answers to know how to categorize and identify the bear. The artist needs the answers to draw an accurate bear. Tooley does not specifically teach children how to draw animals, she says. "Like Picasso, I believe that young children are natural artists, [and] I believe my job is to motivate children to be excited and eager to draw." Observation also is part of both art and science. Tooley's Russia class visited and observed animals in the Zoo, specifically, the Siberian (Amur) tiger and the timber wolves.

Mary Tooley will teach other art classes next year for the ZSM. She is one of six part-time instructors hired by the ZSM during the academic year and seven during the summer. All have degrees in education. ZSM conservation education programs are offered year-round (see www.zoosociety.org and select education).

-By Kristina Allen

Summer Special Exhibits

Can you actually touch a shark without it biting you? Yes! Come see for yourself. This summer you can touch and even feed two types of sharks at the Milwaukee County Zoo's summer traveling exhibit, Sting Ray & Shark Reef, sponsored by Chase. This exhibit runs May 26 through Sept. 9 in the Otto Borchert Family Special Exhibits Building; admission is \$2. Zoological Society members get a free preview of the exhibit (along with the summer koala exhibit-see below) May 22, 23 or 24, the only time that members will be able to get into exhibit free. Look for your invitations packaged with this *Alive*. A 6,000-gallon pool will feature leopard and horn sharks, two species of small, non-aggressive sharks. Leopard sharks are notable for their leopard-like spots. Horn sharks have short, blunt heads with high ridges above

their eyes. These muchmaligned marine animals are a vital part of the ecosystem. So get to know them. Dip your hands in the pool and try to touch these swift swimmers, or purchase special food and feed them.

The sharks' close relatives, the sting rays, are also stars of the exhibit. You don't have to worry about their stinging barbs, either, even though the famous Crocodile Hunter was killed by a sting ray barb last year. This exhibit's sting rays are barbless. These kite-shaped creatures glide through the water by flapping



their fins like wings. Their mouths are on their bellies, which makes it easy search the ocean floor for food! The exhibit features two types of rays: cownose and southern red sting rays.

Also featured this summer at the Zoo are Koalas! sponsored by AT&T. The Australia Building's outdoor Koala Walkabout, after being empty for a few years, will be inhabited by two visiting male koalas this summer, Bamba and Muuri. These adorable, big-eared marsupials live in trees and eat only one food: eucalyptus leaves. Their food is specially grown in Florida and will be flown to Milwaukee a few times a week. The koalas themselves will fly here from the San Diego Zoo sitting next to a zookeeper in a passenger cabin, thanks to transportation provided by American Airlines & American Eagle.

A new flamingo exhibit at the Zoo that was planned to open this summer will open instead in spring 2008. Because construction plans are being modified to create a more environmentally friendly building, the project will take longer. Watch the new flamingo habitat being built this summer near the pond next to the Flamingo Cafe. How can you help us bring back the flamingos? See the back page of *Alive*.



Children reach out to touch a cownose sting ray at the 2005 exhibit at the Zoo Composite photo, by Mike Nepper

This leopard shark swims in the Zoo's Aquatic & Reptile Center. Others will be here in a touring exhibit this summer in the Otto Borchert Family Special Exhibits Building.

Photo by Richard Brodzeller

African Elephant

Arrived at the Zoo: Dec. 14, 2006 Pachyderm Mall

She likes treats, training and warm water. Meet Ruth, the Milwaukee County Zoo's new African elephant. The 25-year-old pachyderm came here from Texas to serve as a companion to the Zoo's resident female elephant, 26-yearold Brittany. Brittany's longtime partner, Lucy, passed away last fall. "Ruth is adjusting well to her new surroundings," says zookeeper Tracey Dolphin. "She is developing a relationship with Brittany

and showing the appropriate responses." The two elephants communicated with low rumbles when they were introduced. Brittany, bossy and dominant by nature, will be the leader of the two, says Dolphin. Ruth, a more mild-

She gurgles when she's happy.

mannered elephant, does not seem to mind. How can you tell the two elephants apart? Ruth is larger than the 6,500pound Brittany, and her tusks are crooked. Ruth is very food-motivated, says Dolphin, and will eat just about any treat zookeepers give her, including sweet potatoes, apples and pears. She is also focused, social and likes the interaction with keepers during training (elephants are trained to accept

What's Gnu? Photo by Richard Brodzeller

health care such as nail trimming). She tends to gurgle when she is enjoying something, such as drinking warm water. Catch the elephants outdoors this spring when it warms up. Until then, you can view them in the indoor elephant enclosure.

Black Tree Monitor

Hatched: Jan. 18, 2007 Aquatic & Reptile Center

Photo by Craig Pelke

looks like a dragon!

Glaedr, the first black tree monitor to hatch at the Milwaukee County Zoo, is an alert and intelligent reptile. "After hatching, Glaedr was very quick and could climb immediately to seek cover," says Craig Pelke, area supervisor of the Aquatic & Reptile Center (ARC). Black tree monitors, lizards native to the

Aru Islands in Indonesia, are built for speed and agility. They have sharp claws to help them climb; long, prehensile tails to wrap around tree branches; and slim, light bodies. Their jet black

> color allows them to absorb heat and to blend into the dark jungle shadows and avoid predators. Black tree monitors are smaller cousins of Komodo drag-

> > ons, says Pelke. Pelke's 11-year-old son even named the new black tree monitor Glaedr after a favorite storybook dragon. Although black tree monitors are not endangered, they are vulnerable because of their small habitat. Our Zoo works with other zoos and the Association of Zoos and Aquariums in a cooperativebreeding program to help conserve these reptiles. They can be tricky to breed in captivity. Says Pelke: "It's difficult to check their gender; so often you don't

know what you have to begin with." Glaedr's parents have had many opportunities to breed, but they first laid eggs in August 2006. Glaedr, whose gender has

not yet been determined, was so small when hatched that he fit in a keeper's hand (see photo). He was too small to go on exhibit this spring and will probably transfer to another zoo when he's older. You can view the Zoo's four adult black tree monitors in the ARC, however,



Koalas Are Coming!

GREAT NEWS! This summer the Milwaukee County Zoo will have two special visitors: Bamba and Muuri. They're our new koala friends. AT&T is sponsoring these two male marsupials, which will stay at the Zoo from May 26 through September 9. While you're at the Zoo this summer, stop by the Australia Building's outdoor Koala Walkabout. There, you'll get to meet the koalas and find out why they are Australia's best-loved animal, even if they do sleep most of the day.

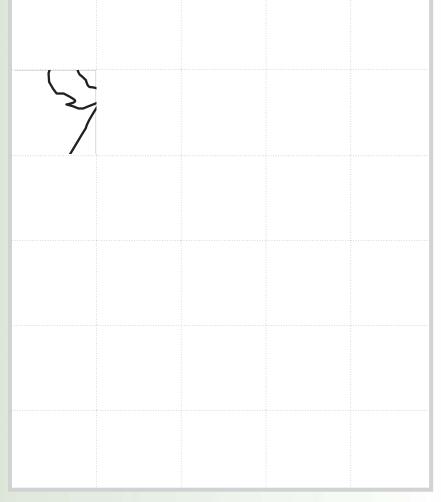
DFAW A KOALA



Follow the lines in the small grid above to draw your own koala in the large, empty grid at right. If you want to color in your koala and background, look at the photo below to find the right colored



pencils, markers, or crayons. Note the pink in the koala's nose and ears. See the koala on the opposite page and on *Alive*'s cover, too.



Note: We've filled in a square to get you started.

ROALA WOPD SCAPCH

H A Z B M A R S U P I A L
E D R K U A K E I T B N P
R N D F U A M B L B A M O
B O I F R Z R M E C M A U
I M L L I H A C A C B P C
V J G H I L K O A L A N H
O A U S T R A L I A C B E
R L H C A R R S R W Q F D
E P B R A N C H E S E H G

In the box at left, find and circle the 10 words listed below the box. Words go up, down, across and diagonally.

WOPD CHALLENGE

How many smaller words can you make from letters in the word **marsupial**? We found more than 50. We're sure there are many more.

ANSWERS: Go to our Web site, www.zoosociety.org, and search Fun Stuff to find answers to the Koala Word Search and Word Challenge.

claws
branches
herbivore
pouched
Australia
marsupial
koala
Bamba
Muuri
mammal

DID YOU

A newborn koala is as small as a jelly bean.







10005 W. Blue Mound Rd., Milwaukee, WI 53226 http://www.zoosociety.org

