

# Alive

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- Inside Summer Camps
- New Zoo Entrance
- Birds: Here & in Guam





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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We're coming to the end of an era – and the beginning of an exciting new Zoo. We're wrapping up our New Zoo II Capital Campaign with the ninth project to be completed in seven years. And what a project! It will change your whole view of the Zoo right from the start, at the entrance. It's called the U.S. Bank Gathering Place and will be completed in time for our warm-weather season at the Milwaukee County Zoo.

Thanks to a major gift from U.S. Bank, this new atrium entrance for pedestrians will offer a friendly place to gather, eat, shop, obtain information and plan your Zoo visit (see page 4). Here's a place where you also can make your mark. The Zoological Society's Annual Appeal this year offers you the chance to have your name in the Gathering Place on a sign, on a tile or on a bench, depending on your donation. (See the Annual Appeal insert packaged with this Alive.)

We're giving you another option with the Annual Appeal. You're already familiar with the terrific animal-information signs that the Zoological Society's Creative Department places throughout the Zoo. At least 60 new signs went up in 2007, and many more are on the way this year. Now you can be associated with these colorful, attention-grabbing, fun-to-read signs. Donors to our Annual Appeal of \$1,000 or more can "make your mark" at your favorite animal exhibit in the Zoo. Pick a continent featured in the Zoo, and then pick an animal-information sign within that area (based on a list you can view online at [www.zoosociety.org](http://www.zoosociety.org)). You will receive individualized recognition on that sign.

You should know that these signs are produced through a team effort between the staffs of the Milwaukee County Zoo and the Zoological Society of Milwaukee (ZSM). Mary Kazmierczak, a researcher for the ZSM Creative Department, tracks down interesting animal facts for the signs. Then ZSM artist Julie Radcliffe creates what she calls "sign language" – easy-to-understand information laid out in a fun and eye-catching design. The signs then are edited by Zoo curators and supervisors as well as ZSM educators and editorial staff, corrections are made, and more proofing is done. Finally Radcliffe prints, laminates and prepares the signs for installation – all in the Creative Department on Zoo grounds.

This is just another example of the cooperative public-private partnership that our non-profit Zoological Society has with Milwaukee County. Our joint capital campaign to improve the Zoo has been the most dramatic example. We're proud to have changed the face of more than 25% of the Zoo since 2001. We're already reaping the benefits of all the new buildings and exhibits. The new Animal Health Center, completed in 2003, is helping us provide the finest veterinary care and a better quality of life for our animals (page 16). Our new Karen Peck Katz Conservation Education Center, completed in 2004, has increased our summer camp participants every year since, to a record 11,700 people last summer (pages 8-10). And the woman who helped make that building possible, Karen Peck Katz, is now chairwoman of the ZSM Board (page 3).

So, as we close one chapter, we hope you enjoy our great new Zoo. This is not the last word. We're already planning future chapters in the Zoo experience.

*Robert Davis*

Dr. Bert Davis  
 Chief Executive Officer



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Get a sneak peek at the Zoo's new entrance, the U.S. Bank Gathering Place.

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## Kids Alive 11-14

Meet the supervisor of the Zoo's Northwestern Mutual Family Farm and a boy who's raising money for the Humboldt penguins. Learn about Native American animals and make your own totem pole.

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

Baby bonobo

Photo by Mark Schueber

## Society Page



## Devotion to Zoo & Education

"I believe in what the Zoological Society stands for," says Karen Peck Katz, newly elected chair of the Zoological Society of Milwaukee's (ZSM's) Board of Directors. "I believe in its mission to conserve wildlife, support the Milwaukee County Zoo, and, most of all, educate people about wildlife and conservation."

That devotion to education led Katz to serve on the ZSM Board's education committee for nearly 14 years, including nine years as chair. "I have worked with the education department just about my entire time [volunteering with the ZSM]," she says. "I believe the education component that the Zoological Society delivers to the community is first-class." In 2003, Karen Peck Katz and her family foundation (she's co-president of the Peck Foundation, Milwaukee LTD) gave the lead gift to an eight-classroom Zoological Society school on Zoo grounds, a capital campaign project. The building opened



in 2004 and was named the Karen Peck Katz Conservation Education Center. Kids and animals always have inspired Katz, who also has been involved with youth camps and the Children's Outing Association. So supporting ZSM summer camps at the Zoo was a natural. "I like that the Zoo is for everybody," she says. "It's a place where families can be together. You can enjoy it whether you're 3 or 103."

Katz joined her father, Bernard (Bernie) Peck, on the ZSM Board in 1994; she had served on the Associate Board for four years before that. Her goals as chair include sustaining the public-private partnership between the ZSM and Milwaukee County, a partnership that raised more than \$30 million in a capital campaign that has transformed more than 25% of the Zoo. "My biggest goal for the Board and the Zoological Society is to work with the Zoo and the County to further enhance our ongoing relationship and to keep our Zoo a world-class zoo," says Katz.



# A ZOO PLACE TO GATHER



Bill Bertha of U.S. Bank shows off the Zoo entrance designs.

We have a surprise for you this spring. The front of the Milwaukee County Zoo is getting more than a facelift. It's getting a completely new "attitude." What a different experience it will be to enter the Zoo through a warm and inviting building rather than an open plaza. Here's a place where you can linger, gather together with family and enjoy a latte while you plan your day at the Zoo. On cold days this new indoor entryway will be especially welcome. Called the U.S. Bank Gathering Place, this expansive entrance to the Zoo will open in late spring for the summer season. As Dr. Robert Davis, CEO of the Zoological Society, says: "The U.S. Bank Gathering Place is going to be the place where we can set the tone for a visit to the Zoo." It will be much easier to find out what's new at the Zoo and what you don't want to miss.

The new entrance is made possible by a major gift from U.S. Bank. At the Sept. 11, 2007, groundbreaking for the project, Bill Bertha (left), president of U.S. Bank-Wisconsin, showed artist's renderings of the building. The 29,548-square-foot space will have a fluid, open feeling

Breaking ground for the U.S. Bank Gathering Place on Sept. 11, 2007, are (from left) Karen Peck Katz, 2007-'08 chair of the Zoological Society (ZSM) Board; Bill Bertha, president U.S. Bank-Wisconsin; John Sapp, 2005-'07 chair of the ZSM Board; Milwaukee County Executive Scott Walker; Dr. Robert Davis, ZSM CEO; Rich Tennesen, vice president of Eppstein Uhen Architects, the Gathering Place designer; Mark Sherry, vice president and general manager at Mortenson Construction, the builder; Zoo Director Chuck Wikenhauser; and Dr. Gil Boese, ZSM president emeritus and capital campaign project manager for the new entrance.



with glass expanses at the east and west ends. The east entrance facing the parking lot will feature a large outdoor canopy to provide shelter from the rain. The indoor area will include an upgraded restaurant, a counter-style snack bar, two gift-shop areas that will have the feel of an international bazaar, an electronic information board, a customer-service area, new restrooms, special exhibits, and even a small area for presentations about the Zoo's animals.

Bill Bertha also promised that the bank would help more children from disadvantaged neighborhoods get the opportunity to visit the Zoo. With this entrance project, he said, "Our commitment is not done with the Zoo." Indeed, Milwaukee County Executive Scott Walker said at the groundbreaking: "I want to thank Bill Bertha and U.S. Bank not only for their commitment to the U.S. Bank Gathering Place but also for their long-term investment in the Milwaukee County Zoo." That investment dates to 1945 when the Zoo was still at Washington Park. The bank, in its various forms, helped bring stellar sea lions to the Zoo in 1956, donated to two capital campaigns, gave grants to conservation and education programs, sponsored special touring exhibits at the Zoo, and supported the Zoological Society of Milwaukee's (ZSM's) Nights in June event in 2000. John Sapp, the 2005-2007 chairman of the Zoological Society Board, said at the groundbreaking: "They

not only give us their money. They give us their talent." Caroline Krider, vice president and senior lender/relationship manager at U.S. Bank, joined the ZSM Board in 2007.

The U.S. Bank Gathering Place is the ninth and final project in the New Zoo II Capital Campaign to improve the Zoo. "U.S. Bank made the largest gift to the capital campaign," said Dr. Gil Boese, Zoological Society president emeritus and campaign project manager for the Gathering Place. The bank presented the ZSM with a check for \$2.5 million in October 2003 to support the capital campaign, touring exhibits and the Platypus Society, the ZSM's highest donor-member recognition group. As of July 31, 2007, the ZSM had raised \$15,602,411 in cash and pledges for the overall campaign – well more than a half-million beyond what the ZSM originally pledged to raise for this \$30 million-plus campaign. Milwaukee County provided the remaining portion as its part in the public-private partnership between the county, which runs the Zoo, and the non-profit Zoological Society.

To contribute to the Zoological Society's 2008 Annual Appeal – and get your name on a sign or tile in the new Zoo entrance or on a sign at an animal exhibit – see the insert packaged with this *Alive*. Or go to our Web site at [www.zoosociety.org](http://www.zoosociety.org) or call us at (414) 258-2333.

### THANKS TO SPECIAL DONORS:

- *U.S. Bank* gave the lead gift to the Gathering Place.
- *Zoological Society Annual Appeal donors* are helping complete the project.
- *Hawks Nursery* is providing landscape design and plants.

The Zoo's main entrance before renovation was an open area.



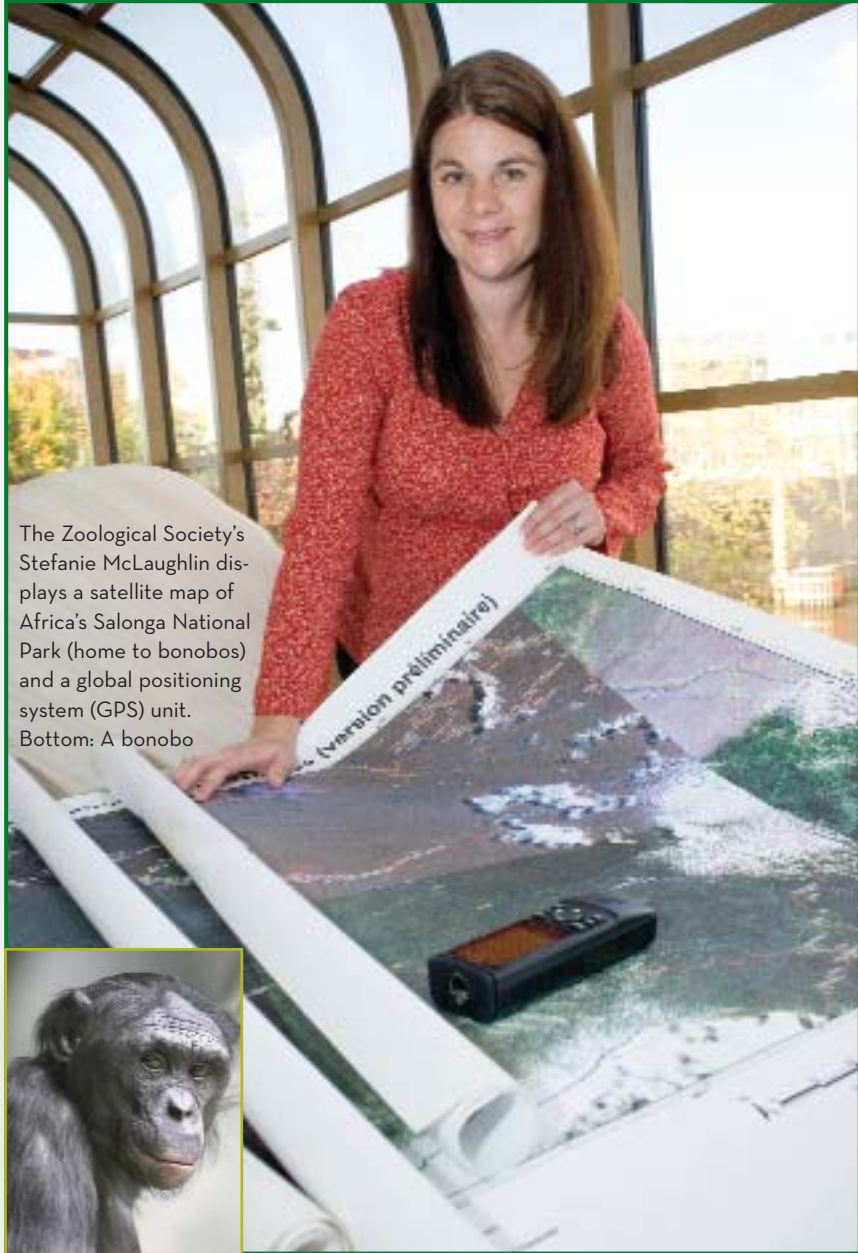
Artist's rendering of the future U.S. Bank Gathering Place.



Deep in the heart of the Congo River Basin's Salonga National Park, Dr. Gay E. Reinartz spots a group of bonobos making their way through the thick rain-forest canopy. Dr. Reinartz, the Zoological Society of Milwaukee's (ZSM's) conservation coordinator, is on alert. Bonobos are endangered great apes that ZSM researchers have been studying and protecting in central Africa's Democratic Republic of Congo for more than a decade. As the great apes swing from tree to tree, Dr. Reinartz jots down crucial research data: the date and time of the sighting, the location and the surrounding habitat. But she doesn't use only pen and paper to take notes. Here in the most primitive of locales, she also uses the latest technology: a global positioning system device (GPS). With this hand-held computer not much bigger than a TV remote control, she marks her exact location in the field.

Several months later, Dr. Reinartz and Stefanie McLaughlin, the ZSM's assistant conservation coordinator, examine electronic satellite maps of the Salonga in their Milwaukee office. The maps are scattered with GPS points showing routes Dr. Reinartz trekked in the field as well as the places where bonobos were spotted. The data came from Dr. Reinartz's GPS unit. The maps were created by an even more sophisticated tool: a computer program called a geographic information system (GIS), which allows researchers to plot field data on satellite images. "Analyzing our data using GIS has allowed us to more accurately visualize our progress and findings in the field," says McLaughlin. "Before, we would attempt to manually plot our location on inaccurate paper maps and find that our waypoints were way off – sometimes on the wrong side of a river! Now, thanks to this technology, we can see precisely where we've been in the forest."

Pinpointing a location in the Salonga, a vast rain forest in the Democratic Republic of Congo, is no easy task. Very few maps exist of this uncharted national park, home to bonobos, forest elephants and the Zoological Society's bonobo conservation project called the Bonobo and Congo Biodiversity Initiative (BCBI). That's why global positioning technology – used for navigation, urban planning and map-making – has great potential in conservation research, says McLaughlin. "This is a way to identify exactly where signs of bonobos are." Knowing where bonobos are helps conservationists to better protect them. For example, bonobos prefer certain plants to eat. When ZSM researchers find areas plentiful with those plants, ZSM's Congolese eco-guards can patrol those areas to protect bonobos and scare away poachers.



The Zoological Society's Stefanie McLaughlin displays a satellite map of Africa's Salonga National Park (home to bonobos) and a global positioning system (GPS) unit. Bottom: A bonobo

## Mapping Bonobo Territory

This technology allows Zoological Society researchers not only to mark the locations where the bonobos are found, but also to help locate other large mammals such as forest elephants – as well as the poachers who illegally hunt the animals for bushmeat. During her bi-annual trips to the Salonga, Dr. Reinartz and her colleagues use the GPS devices to note the locations of everything from various forest and soil types to bonobo nests. Back in Milwaukee, Dr. Reinartz and McLaughlin analyze the multi-colored satellite maps that show the research data.

Patterns on the maps are telling: a blue circle might signify mixed mature forest (the bonobos' preferred habitat), while red triangles could represent poaching camps. For example, mixed mature forest sometimes contains Marantaceae, an edible, leafy plant that bonobos love. So unexplored areas rich in Marantaceae are very likely to attract the great apes. On the other hand, signs of poaching, such as abandoned camps and hunting equipment, suggest that bonobos and forest animals are not around. (Human

presence frightens large animals.) The maps make it easy to see which areas Zoological Society researchers have covered and which areas should be explored on the next mission. “We can use these satellite images to help locate potential bonobo habitat before going into the field,” says McLaughlin.

Maps showing bonobo presence are also important because not so long ago some authorities doubted that bonobos even existed in the Salonga. Photos and videos collected by the Zoological Society over 11 years prove that bonobos do live in the forest. The research team, based at Etate, the

Congo photos provided by Dr. Gay E. Reinartz



◀ Dr. Gay E. Reinartz (left, front row) and the Zoological Society's team of Congolese eco-guards look for endangered bonobos in the Salonga. Mboyo Bolinga (front) holds an antenna and a GPS unit he has learned to use.

Zoological Society's research station in the Salonga, has increased their research and surveillance area from 150 to 400 square kilometers in just the last year. “Perhaps most exciting of all is that we haven't yet found any limits to the bonobo population surrounding Etate,” says McLaughlin. “The maps will help us pinpoint these limits, if and where they do exist.”

The research continues even when Dr. Reinartz is away from the Salonga. The ZSM's Congolese employees use GPS units to collect data year-round. They also patrol parts of the Salonga to protect wildlife from poachers. By keeping up patrols, the guards are “providing protection and maintaining a presence around Etate,” says McLaughlin. “This sends a message to any potential bonobo and elephant poachers that this area is protected.” Training the guards to use GPS technology has been a special challenge. In 2005, only two of the six Etate guards could read and write well enough to use the GPS units and submit reports about the data. In fact, the area around Etate has an 80% illiteracy rate. In response, the Zoological Society established a literacy school at Etate to teach guards and employees to read and write in French and Lingala, a trade language in the Congo. The literacy training will help the remaining guards learn to use GPS units and collect data. By spring 2007, a third Etate guard could read well enough to begin GPS training, while the three others may soon follow suit.

In the meantime, “we have whole new research dimensions, thanks to this technology,” says McLaughlin. “The maps we create have helped evolve our program.” The maps allow Zoological Society conservationists to send tangible evidence of their research to grantors and donors who support BCBI, and to scientific journals. “This is concrete stuff,” adds McLaughlin. “It's so important to have this data to show what we're doing in the field.”

So when you visit the Milwaukee County Zoo's group of 20 bonobos living comfortably in a forest-like setting, think of their cousins in the wild.

Teacher Mpuma Longomo gives a reading lesson to Zoological Society eco-guards at its research station in the Democratic Republic of Congo. Guards who read and write can be trained to use GPS technology.

Those animals are always searching for food, fleeing predators and poachers, and facing dwindling habitat due to logging and other human activities. Scientists even hesitate to guess how many bonobos are found in the wild today. Yet modern technology – and dedicated conservationists – may provide a big enough window on their world to help save these apes.

*By Julia Kolker*



## LIVE From the Congo

Tropical rains, uncertain airlines and a trek into the heart of the rain forest are just some of the things Dr. Gay Reinartz experienced on her latest mission to the Salonga. Now you can read Dr. Reinartz's field dispatches from the Congo sent to Milwaukee via a solar-powered computer. On her November-December 2007 trip, the ZSM's conservation coordinator kept a journal for Milwaukee's Shepherd Express newspaper. The journal entries, printed in the newspaper and on its Web site, are available online at [www.zoosociety.org](http://www.zoosociety.org). Hear more about Dr. Reinartz's travels and field work this winter. On Jan. 28, 2008, she will give a talk at Crossroads nature center in Sturgeon Bay, Wis., from 1-3 p.m.; call (920) 746-5895 for registration information. On Feb. 12, she will speak 3:30-5 p.m. at the University of Wisconsin-Milwaukee's Honors College, 2441 E. Hartford Ave; call (414) 229-4658 for details. Both talks are free and open to the public. Want to learn more about bonobos? The ZSM's 2007 book, *Bonobos: Encounters in Empathy*, written and donated to the Society by Jo Sandin, will be available for purchase at the talks.





# Summer Camps:

## THE INSIDE STORY



How many mouths do you have? Aubrey Moore, 3, of Wauwatosa counts one mouth, just like a giraffe! Aubrey and her mother, Ardith, attended Gentle Giants summer camp last August.

## Camps Brochure

Interested in Zoological Society summer camps? You can find a camps listing in the Summer Camps brochure packaged with this *Alive*. Or check our Web site at [www.zoosociety.org/summercamps](http://www.zoosociety.org/summercamps).

Balls of lard aren't usually the most appetizing thing in the world, but Mary Laughlin, 7, of Brookfield sure enjoyed making them in a Zoological Society summer camp last year. And the Zoo's polar bears definitely liked eating the lard balls, a treat for them. "The zookeepers put the ball on top of the fence so the polar bears would stand up and lick it," Mary says. "It was really squishy."

Mary's camp – Munch, Gulp, Slurp – was one of 481 camp sessions offered by the Zoological Society of Milwaukee (ZSM) last year at the Milwaukee County Zoo. More than 11,700 people attended the camps, sponsored by Glue Dots® Brand Adhesives, to learn about animals, habitats and conservation. Instead of just sitting in a classroom and hearing a list of what zookeepers feed polar bears, Mary and her camp mates had the hands-on experience of making the bears' food themselves. The ZSM camps give children (and parents) a feeling of being an "insider," and that's what keeps many families coming back. The camps offer a different experience and perspective on the Zoo that typical zoogoers don't get.

"You get to go behind the scenes, which you'd never be able to do if you weren't at camp," says Ryan Kais, 18, of West Allis. He attended ZSM camps since early childhood. At age 15, he started volunteering as a high school-age assistant at ZSM camps. He just finished his fourth year as a volunteer. His sister, Ashley, 15, followed the same pattern and finished her first summer as a volunteer in 2007. Ryan and Ashley Kais and Mary Laughlin are among children from several families who have attended ZSM summer camps year after year. We followed four of these families through our 2007 summer camps to find out why they love camps so much.

Let's take two of the perennially popular camps: Junior Zookeeper and Senior Zookeeper. In these camps, the kids sometimes get to clean animal areas. Even kids who hate cleaning their rooms at home seem to love cleaning the animals' rooms at the Zoo. Gretchen Klein, 9, of Franklin remembers her experience years ago cleaning the hyenas' exhibit in Junior Zookeeper camp (for ages 4 and 5). "I scrubbed down the walls," she says with a giggle since it's something she probably wouldn't do normally. Her sister, Amelia, 6, went to Senior Zookeeper (for ages 6 and 7), and campers helped zookeepers prepare the animal's space for the night. "We spread out the hay for the zebras," Amelia says. "They like to rest on the hay." Both sisters loved the camps and have been attending since they were 2 years old. Their two brothers, Charles, 4, and Peter, 2, also attend camps.

Ashley Kais says zookeeper camp was her favorite, too. "It's the one that sticks in your mind the most because it's the one you do the most in. You got to do something that you'd never know you'd be able to do."

Even some of the parent-child camps go behind the scenes. In fact, for Ardith Moore, a mother of four from Wauwatosa, one of the reasons she went with her kids to ZSM camps was the opportunity



to get an insider's view of the Zoo. "I contemplated being a zookeeper. If I'm gonna come and learn and see the behind-the-scenes stuff, I have to come with my kids." Three of Moore's children – Aidan, 11, Amelia, 9, and Aubrey, 3 – all have attended camps since they were 2 years old. Her fourth child, Avery, 13, started ZSM camps when he was 3.

Moore says she likes the giraffe camps best. Last summer she took Aubrey to a Gentle Giants camp on giraffes. "The giraffes came up to us like, 'Hello, hello, people!'" Moore says. She also remembers seeing the giraffes in their old enclosure. The giraffes were in one room of the enclosure, the campers in another, and a window connected the two. "The zookeepers were feeding the giraffes bananas, and the giraffes were right there!"

Even camps that don't bring the kids completely behind the scenes still give them a view of the Zoo they hadn't seen before. All of the camps teach the kids about a certain animal or groups of animals, and often the instructor will have an artifact from the animal to share with the class. For example, in Moore's giraffe class with Aubrey, the teacher passed around a giraffe hide for the kids to touch. In the marine camps, kids were able to touch a realistic mold of a shark jaw almost as big as they were. "They have things you can go close to that you normally wouldn't be able to," Ashley says.

The resources at the Zoo and Zoological Society are unique, another reason families are so fond of summer camps. Catherine Laughlin, a mother of three from Brookfield, says she likes the hands-on education children get by touching fur, making animal food, and creating miniature animal exhibits. She has sent her daughters – Mary, 7, Megan, 10, and Molly, 8 – to camps since the girls were 2 years old. "I believe hands-on experiences are how they learn. You can't learn everything from a book."

And this education wouldn't be possible without the Zoological Society instructors. "They're wonderful!" Moore says. "The teachers have always been enthusiastic at an age-appropriate level." For example, in the 2-year-old classes, instructors allow the kids to get up from circle time (when the whole class sings or learns in a circle) and do crafts around the room as long as they're quiet. They understand that 2-year-olds get restless, and they cater to the children's needs.

Activities are age-appropriate as well. Some of the younger kids make costumes as their craft (all camps include crafts). The Moore kids loved costumes, their mom says. They would parade around the house and show off their costumes to their dad and grandparents. Aidan Moore made a turtle costume when he was

age 2 or 3, and he had a little egg to go with the outfit. "He'd curl up around the egg because he was so little, and then he'd hatch out of his egg," Moore says. As the kids mature, so do the activities. "They do a good job of moving the information along and teaching more in depth as the kids get older."

For example, some camps allow the kids to explore possible careers. In one camp teaching children about veterinarians, Amelia



**Left:** Ardith Moore and her four children arrive at the Zoo last Aug. 1 to look for their summer camps rooms. Amelia (front), 9, points out her room to her brother Aidan, 11. Avery, 14 (back), shows Aubrey, 3, the room she and Mom need to go to.

**Center:** Thomas and Deborah Klein of Franklin, in the Zoo's goat yard last summer, say all their children started Zoological Society summer camps at age 2: daughters Gretchen (left in back), 9, and Amelia, 6; and sons Peter (left), 2, and Charles, 4.

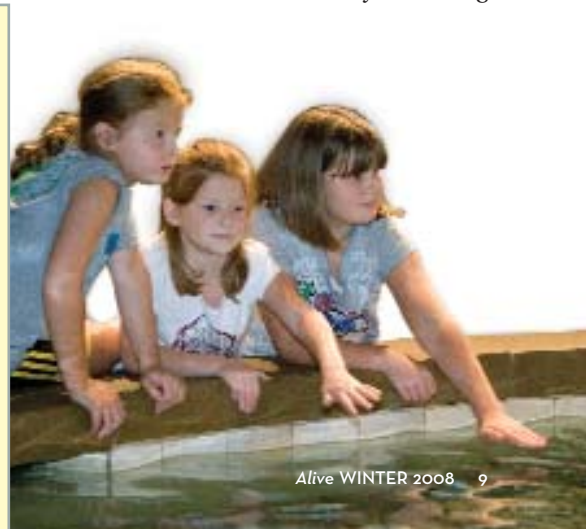
**Right:** Ryan Kais (middle), 18, and his sister Ashley, 15, talk with a boy during lunch break. Both siblings "graduated" from attending camps as children to volunteering as high school assistants at last year's camps.

Moore and her fellow campers performed health exams on goats. Each child picked a goat and checked yes or no on a sheet of paper answering questions such as, "Is the goat limping?" "I want to be a nurse when I grow up," Amelia says. "It was kind of cool learning what vets do."

ZSM camps also seek to educate kids about animals, the environment and how to save the two. Many parents see this conservation education as very important. "The camps make it a little more concrete," says Debbie Klein, a mother of four from Franklin. "It's easy to see a show on TV that says there are only 1,000 white rhinos left or whatever." Seeing live rhinos at the Zoo brings the facts to life. Klein says she hopes that ZSM camps will teach her kids to care about the environment and show them that the danger of species dying off is real. Her 6-year-old daughter, Amelia, certainly seems to be taking these lessons to heart as she says: "We have to learn so we can help the animals when they're running out!"

*By Erin Wiltgen*

Megan Laughlin (right), 10, and her sister, Mary (center), 9, reach out to touch a leopard shark at the Sting Ray & Shark Reef 2007 summer exhibit, sponsored by Chase. Sister Molly, 8, watches. All the sisters have attended Zoological Society summer camps since age 2.





# Counting Bubbles & Giggles

Summer Camps at the Zoo bubble with fun. Sure, you learn about conservation and you visit the animals. But can you guess how many giggles or guffaws campers have? In part two of our series on amazing facts about the Milwaukee County Zoo, you'll discover some gargantuan numbers and gooey, sticky facts about Zoological Society camps. (See page 8 for more summer camp information.)

**Q:** How many giggles and laughs do summer camps produce?

**Answer:** Kerry Scanlan, the Zoological Society's summer camps coordinator, estimates that last year campers giggled, hooted or snickered at least three times per camp. That's 35,100 laughs! On second thought, she says, it was a lot more — maybe an infinite amount.

**Q:** How many hours did staff and volunteers spend helping campers get those laughs?

**Answer:** Zoological Society instructors spent 2,558 hours teaching summer camps, and Zoo Pride volunteers put in 852 hours. Also, 20 college-student paid interns and 45 high-school-age volunteer assistants contributed about 10,497 hours. All that's equal to 579 straight days, or nearly 1½ years worth of help and dedication squeezed into a summer.

**Q:** What camp is the gooiest?

**Answer:** Careers No. 1 in which kids ages 12 to 14 make a gooey substance from sand, peat moss and concrete — and get it all over themselves in the process.

**Q:** How many bubbles did campers blow last summer?

**Answer:** Actually, we don't know, but our Conservation Education Department runs through two to three gallons of bubble solution every year!

**Q:** What's the stickiest camp?

**Answer:** They're all sticky! For crafts, most of the camps use clear sticky circles from Glue Dots® Brand Adhesives. In fact, in 2007, campers used 14,987 glue dots. If you lined up these dots, they would stretch out for nearly half a mile.



**Q:** How can I get a good laugh while waiting for summer camps to start in June?

**Answer:** Why not make your own bubbles? For a bubble recipe, go to our Web site, [www.zoosociety.org](http://www.zoosociety.org), and look under Education/fun stuff.

Swatting at bubbles, Emily Gehrke, 3, of Waukesha had fun pretending to be a giraffe shooing away flies. Emily and her mom, Andrea, attended Gentle Giants, one of the Zoological Society's 2007 summer camps that featured bubbles.

# Kids ALive

## A Dream Come True



Lisa Guglielmi feeds corn to Elaine, a Guernsey cow.

### Lisa Guglielmi has her dream job.

She gets to work with farm animals, which she loves. Every morning she stops to hug one of the Zoo's horses. It's common for zookeepers to go to the farm if they need some cheering up. The animals love the attention. "All I have to do is go into the horse or calf barn and they put a smile on my face," she says. Guglielmi is area supervisor of the Northwestern Mutual Family Farm. She is in charge of acquiring farm animals and hiring farm staff.

You may be wondering what happens to the farm animals in winter. Most of the farm is closed, but there are still plenty of animals to see. The guinea hogs, horses, donkeys, and cows may be in the barns or out in the yards (unless there's a snowstorm). Warm up inside the Dairy Barn by visiting the Zoo's seven breeds of cows: Black and White Holstein, Red and White Holstein, Jersey, Guernsey, Brown Swiss, Ayrshire and Milking Shorthorn. Five of those breeds are milked during cow-milking

demonstrations two or three times a day. On average, three calves are born each year. The Zoo usually keeps the girl calves because they can have babies and replace older females. The boy calves often are sold to farmers. The Zoo sells its milk to Golden Guernsey Dairy in Waukesha. The next glass of milk you drink may have come from the Zoo's cows.

Some animals are sensitive to the cold. They stay inside in the winter. These include the goats, the birds of prey, and animals such as turtles and chickens. To make sure the goats are healthy when you pet them in the summer, the staff does a goat roundup in March. All 72 goats are weighed and given vaccinations and checkups. Most of the farm animals receive special activities or treats routinely in winter. Zookeepers give them boxes to play in or various toys

and food treats. The chicks and the bees return to the farm in spring.

Growing up, Lisa Guglielmi learned to love animals by caring for her family's pets: two dogs, a horse, gerbils, kittens, and fish. She became more interested as she watched animals in Disney movies and "Mutual of Omaha's Wild Kingdom" TV shows. At the Zoo she has worked with many animals, from birds to bats. Farm animals such as horses, and their cousin the zebra, are still her favorites. Since she started working at the Zoo in 1992, she has collected about 50 zebra figurines.

To work in the Zoo's farm, you must have six months' experience working with animals and a high school diploma. Many Zoo staff have college degrees, too. Guglielmi received a B.S. in biology with a zoology emphasis from the University of Wisconsin-Oshkosh. This winter stop by the farm, which is the city of Milwaukee's only working dairy farm, to learn more about farm animals.

-By Danielle Johnson

# Exploring Tribal Traditions

Native Americans were the first people to live in North America. Most Native Americans belong to groups called tribes. There are over 500 tribes in the United States. Wisconsin has seven tribes: Brothertown, Chippewa (Ojibwe), Ho-Chunk, Menominee, Oneida, Potawatomi, and Stockbridge-Munsee. Each tribe has its own stories and traditions.

Animals are a large part of tribal stories and traditions. Adult tribal members often use animal stories to teach lessons or to explain the beginning of the Earth to kids, says Dawn Scher Thomae. She is the associate curator who takes care of the Native American collections and exhibits at the Milwaukee Public Museum. Several animals found at the Milwaukee County Zoo are special to Wisconsin tribes, she says. Bears, turtles, snakes, turkeys, wolves, cranes, elk and moose are found in local tribal histories. Visit the Zoo's Wolf Woods and learn the name of each of the five timber wolves. Each name means "friend" in a Native American language. The totem poles in Wolf Woods are a tradition of the Northwest Coast Indians who live in Alaska and Canada, says Scher Thomae. The Zoo farm's Native American garden features plants from the Midwest to the Southwest. And the Zoo's Birds of Prey & Friends Show (held in summer) features hawks and a bald eagle that are important to the Potawatomi. The Forest County Potawatomi Community sponsors that show. Find out more about Native American culture on these pages.



A Potawatomi spiritual leader gave the Zoo's new bald eagle a name last year. Billy Daniels Jr. (left) named the bird Shkabewes, which means Messenger in Potawatomi. Steven Cox, a farm attendant, held the young eagle during the official ceremony.

**Birds as Symbols** The Potawatomi tribe has more than 40 clans, or family-heritage groups. Each clan is named after an animal. Each clue below refers to one of those animals. Unscramble the letters to answer the clues. Each of these birds is pictured here and lives at the Zoo.

1. I am a bird that rules the sky. I have a connection to the gods.

DLBA LG AEE

3. I am a bird that can be trained and is helpful to humans.

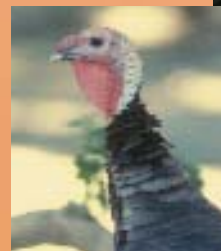
W H K A

2. I am a long-necked bird known by my loud, echoing call.

N C A R E

4. I am a bird that symbolizes sacrifice.

Y E T K U R



# Build Your Own Totem Pole

A totem is a symbol of an animal or object important to a particular tribe or family. Northwest Coast Indians made totem poles that showed well-known stories, clan history or an important event. Poles were made from huge trees. Totems were painted or carved on the wood. Decide what totems are important to your family. Then build a totem pole. Here's how:

## Supplies:

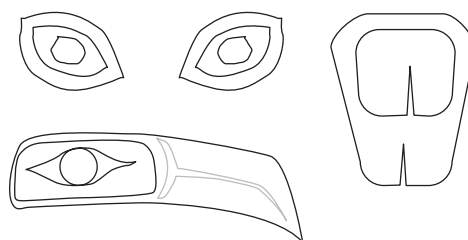
- 1 piece (9 by 12 inches) colored construction paper
- 1 piece (8½ by 11 inches) colored paper
- 1 paper toweling cardboard tube
- 2-inch-long colored pipe cleaner\*
- \*(have a parent cut 2 inches off a 12-inch-long pipe cleaner)

- Scissors
- Clear glue
- Black marking pens, crayons or markers
- Clear adhesive tape

## Directions:

1. Draw and color your totem animals and designs in a 2-inch column down center of construction paper. If you like, draw a winged animal at top.
2. Tape long end of construction paper to paper toweling tube. Wrap paper tight around tube but don't cover up designs. Tape it to tube.
3. Draw wings on 8½-by-11-inch paper; make them about 11 inches wide by 3 inches tall. Or log on to our Web site at [www.zoosociety.org](http://www.zoosociety.org) to print out wings. Cut them out with scissors, and tape to back of totem pole, facing front.
4. Winged animal's nose: Bend a pipe cleaner as shown in diagram. Add glue to flat ends and stick onto front of totem pole where a nose or beak should go (see photo). Let dry 1 hour before standing your totem pole up on a flat surface.

Try some shapes like this:



Bend your pipe cleaner like this:



Answers to  
Garden  
Game:  
1. Corn;  
2. amaranth;  
3. marsh  
mallow;  
4. feverfew;  
5. sage;  
6. squash;  
7. skullcap.

## Native American Garden Game

The Zoo celebrates different cultures in its Heritage Gardens in the Northwestern Mutual Family Farm. The following plants are grown in the Zoo's Native American garden: **feverfew, sage, amaranth, skullcap, squash, corn, marsh mallow**. Match each of these plants with the clues below.

1. This white or yellow plant grows on a stalk. Its kernels are ground into flour.
2. This pretty plant has dark red stalks and tufts. Its seeds are used in breads and cereals.
3. This pink-flowered plant has sweet roots that once were used to make a spongy, sugary treat.
4. This bushy plant is used as a medicine to drive away body heat.
5. This herb's dusty gray-green leaves are used in cooking or are burned as a cleansing scent.
6. This gourd-shaped fruit is hard outside and soft inside. It's eaten as a vegetable.
7. Named after a hat, this purple-leaved, minty herb is used as a medicine.



Amaranth



Marsh mallow



Feverfew



Sage

# Pennies for Penguins

Alex Brodkey loves animals. His favorite is the Humboldt penguin. He found out humans were putting this animal in danger. He decided to help. So he collected \$204.75 through a project he called Pennies for Penguins.

"I think that kids should find a cause they believe in and find a place that supports that cause," Alex says. He chose the Milwaukee County Zoo. At first Alex wanted to help out by volunteering at the Zoo. He's 13.

Kids have to be at least 15 years old to volunteer with the Zoological Society. So his next idea was to raise money for penguin research. Dr. Roberta Wallace, the Zoo's senior veterinarian, told Alex about the penguin research that Zoo staff have been doing since 1994. Twice a year Zoo staff members fly from Milwaukee to Algarrobas, Chile, a country on the southwest coast of South America. This is where a lot of Humboldt penguins live. The staff count the penguins and study the threats to these birds. Penguins don't fly, but they're great swimmers. Sometimes they get tangled in fishing nets. They also are threatened by humans building near their coastal homes. Humans also put them at risk when they fish for the same food penguins eat.



Dr. Wallace says there are now about 30,000 Humboldt penguins in Chile and about 8,000 in the South American country of Peru. They face extinction within your lifetime if humans continue to put them in danger. Extinction means all of one type of animal die out.

At his Mequon home, Alex created posters showing articles and pictures of Humboldt penguins. He displayed them at the Zoo in July 2007 during all three of the Zoological Society's Kids' Nights (featuring activities for members and their kids). He stood in front of the Humboldt penguin exhibit each night to collect money.

Alex's brother, Zach, also got involved. Instead of asking for birthday gifts for his 10th birthday, Zach asked friends to donate to Pennies for Penguins.

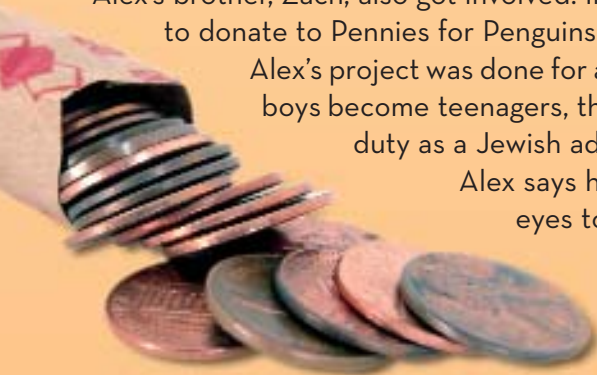
Alex's project was done for a ceremony called a bar mitzvah, which he had last October. When Jewish boys become teenagers, this ceremony helps them grow into adults. The penguin project began his duty as a Jewish adult to do good deeds and to help others.

Alex says he learned a lot. "It was hard to ask strangers for money, but it opened my eyes to see how generous people can be." Alex hopes kids like you also will take action. If an animal you like is threatened, you might want to join the Kids Conservation Club. This Zoological Society club sponsors endangered animals at the Zoo. Go to our Web site for details: [www.zoosociety.org](http://www.zoosociety.org).

-By Danielle Johnson



*Tyler Haskey, 2, of Waukesha put pennies in Alex Brodkey's Pennies for Penguins jar last July.*



# BACK TO THE FOREST



Guam rail  
Photo by Bryan Kwiatkowski

It's early morning on the Pacific island of Rota. The sun has just risen when a truck pulls into a large grassland. Three conservationists, including the Milwaukee County Zoo's Bryan Kwiatkowski, climb out, unloading animal carriers. Inside is precious cargo: 50 Guam rails, some of the most endangered birds in the world. The birds – including three from our Zoo – were hatched and reared in captivity, and are about to be released into the wild. Kwiatkowski and his colleagues work quickly to set the birds free. It is hot and humid, and Guam rails could overheat in their crates. The researchers pop open the crate doors. The birds jump out, inspecting their new home. Then they dart off into the dawn.

In June 2007, Kwiatkowski, a zookeeper in the Herb & Nada Mahler Family Aviary, traveled to the west Pacific island of Guam to help care for and release these small, reclusive birds. Guam rails – along with most of Guam's native forest birds (including the Guam kingfisher, also on exhibit at our Zoo) – have been gone from the wild since the 1980s. The birds are victims of brown tree snakes, an alien species brought to Guam inadvertently in a military aircraft during World War II. For the past decade, a government agency in Guam has been working to establish a sustainable population of Guam rails on the nearby island of Rota, which is free of brown tree snakes. As part of this program, the Milwaukee County Zoo has bred, cared for, and tracked Guam rails' behaviors since the early 1990s. In 2005, three chicks successfully hatched at the Zoo; in 2006, they were sent to Guam for release into the wild. (As of December 2007, our Zoo had no Guam rails but hoped to acquire a pair in 2008 from the 55 living in 14 North American zoos.)

"It was a wonderful experience to observe these animals in their home environment, foraging for food and exhibiting other wild behaviors," says Kwiatkowski of his 10-day trip, which was partly funded by the Zoological Society and Zoo. But the project wasn't without challenges. Although fewer brown tree snakes are found on Guam today, the island is still not safe for its native birds. Rota, where the rails have been released since 1989 with on and off success, is not an ideal alternative. In the past, local researchers had limited time to get birds acclimated to their new territory and to monitor them. "This made it difficult for researchers to understand what worked and to learn from their mistakes," says Kwiatkowski. "Rails had low survival rates on Rota due to poorly chosen release sites." The birds fell victim to predatory feral cats and nest-raiding rats. Many rails dispersed to far corners of the island and thus couldn't find mates during the breeding season.

This time, local researchers had chosen a site surrounded by forest and mountains to contain the birds in a smaller area and



Zookeeper Bryan Kwiatkowski examines a Guam rail at the Zoo to weigh it before it was sent out to another Zoo for breeding.

Photo by Richard Brodzeller

A researcher opens a crate door to release a Guam rail into the wild. Page background is a beach on the island of Rota.

Photo by Bryan Kwiatkowski



help them establish territories and find mates. Researchers also set up traps for feline predators. Although Guam rails' long-term survival in the wild is still uncertain, Kwiatkowski's colleagues have reported some early successes. As of September 2007, there was one breeding pair of Guam rails on Rota.

Kwiatkowski isn't discouraged. "It was extremely rewarding to be introducing an animal into the wild that the Zoo has dedicated so much time and effort to preserve," he says. He also helped conservationists on Guam to breed endangered Guam kingfishers and develop an enrichment program for endangered Mariana crows (to help the birds demonstrate natural behaviors and exercise their minds while in captivity). He was impressed by the dedication of Guam researchers, who often do not have access to up-to-date equipment and facilities. "They really care about the animals they work with," says Kwiatkowski. "And even though we are from different parts of the world, we are all just trying to work toward one common goal: the survival of the Guam rail."

By Julia Kolker

# Animals & Hospital Care

Part 2 of two parts exploring the benefits of the Zoo's new Animal Health Center: Areas that you can't see

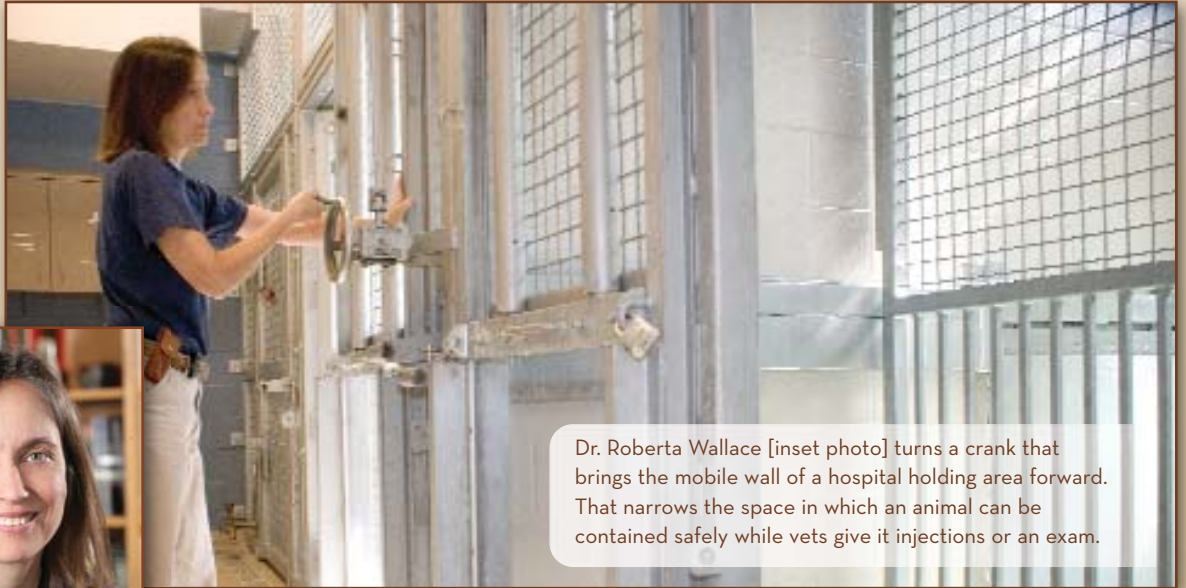
Monty, an elderly rockhopper penguin, was blind in both eyes due to cataracts. "All he did was stand around in the back of the Zoo's rockhopper penguin exhibit," says Dr. Roberta Wallace, the Milwaukee County Zoo's senior veterinarian. To improve Monty's quality of life, she says, "We decided that we would restore some of his sight by removing one of the cataracts."

The decision to operate on Monty, who would need intensive follow-up treatment, was made mainly because the veterinarians knew that the hospital had a special room that could keep him cold (rockhopper penguins need to stay at about 45 degrees).

Before the new Animal Health Center was completed in 2003, it would have been very difficult to give him the six weeks of daily, post-operative eye-drop treatments needed. The old hospital did not have a place to keep him. The new hospital has a specially planned "cold room" for cold-loving animals (as well as a separate "warm room" for reptiles). The cold room became a home away from home for Monty. It had a pool for him to play in. The staff could treat him easily and even bring in another penguin as a companion.

Monty's cataract was removed on April 10, 2007, by experts at the School of Veterinary Medicine at the University of Wisconsin-Madison. When Monty returned to the Zoo's Animal Health Center, the staff immediately realized the surgery was a success when Monty started pecking at a tiny hole in the zipper pull tab on the jacket of Celi Jeske, hospital supervisor. It was June 2 before Monty could return to the Zoo's rockhopper exhibit. "This has improved his quality of life," says Dr. Wallace. "He can see. He eats better. Before he couldn't see the fish to eat." The surgery and the follow-up care made a big difference in the life of this member of an endangered species.

"I think that the new facilities – whether it's the treatment and surgery rooms, the holding facilities, the pathology lab, or all the new equipment – have enabled us to really provide the best possible medical care to a wider variety of animals in the Zoo collection," says Dr. Wallace. "The inadequacies of the old hospital



Dr. Roberta Wallace [inset photo] turns a crank that brings the mobile wall of a hospital holding area forward. That narrows the space in which an animal can be contained safely while vets give it injections or an exam.

limited both the types of animals that could be brought to and kept at the hospital, and the level of care we could give the animals. The hoof stock had to be kept outside because there was no room inside. If it got too cold, there was nothing you could do about it. If you were giving I.V. fluids, the fluid would freeze. The new facility eased or removed some of those limitations, allowing us to provide better care, and to do so more safely, both for the animals and hospital staff."

Consider the back area of the hospital – an area off limits to visitors to prevent contamination – and its large-animal ward. "It has housed bonobos, the female orangutan M.J., the hyenas. It's a multipurpose room." It's so versatile that even birds use it. "We had a 33-year-old Ruppell's griffon vulture in there that needed critical care. She was an old animal that started having seizures in 2004. After every seizure, we would treat her for several days with I.V. fluids. The stall was the perfect size. She could stretch her wings out, but could not walk away to the point of pulling out her I.V. line. She would spend time at the hospital after each episode, and her quality of life in between seemed to be pretty good. She lived for about 2½ years after her first seizure. She eventually died of old age in November 2006."

Safety was a huge focus for the new hospital. The door separating the back holding areas for animals from the hospital's



offices, treatment room, etc., is heavy enough to withstand the attack of a male gorilla. The hallway leading to that door has three sets of doors, each with a full cement wall at top rather than ceiling tiles and air space above that an animal might crawl up into. The room that houses dangerous lions and leopards has a small walk-in, caged space to protect a staff person who wants to view the full room and use a tranquilizer gun to dart any animal that might get loose. And the large-animal ward meets air-filtering and special quarantine standards for mammals set by the U.S. Center for Disease Control.

Safety is also important when housing venomous snakes. The door to the warm room is almost all window (see photo) so that staff can look to make sure a snake is not hiding up next to the door, ready to escape or strike when the door is opened. And the room has no holes or crevices where a snake can crawl into and hide. The staff put a lot of thought into designing both for safety and for the animals' comfort. "There are four indoor stalls for hoof stock, two of which have padded floors for animals that have sensitive feet: tapirs, bongos, animals that may pace a lot such as impalas," says Dr. Wallace. They also have stalls without padded floors because some animals root and could dig into the padding or nibble on it as goats might. There are also four mesh-covered outside stalls, all connected to the inside stalls so that animals can be shifted easily. These hoof-stock stalls also can house birds. Last October two cinereous vultures came to Milwaukee from the Racine Zoo. Like all new animals, they were quarantined for a month at the hospital to make sure they had no diseases that could spread to other animals. They needed lots of space. So a hoof-stock stall, at about 12-foot square, was ideal. Plus, they had access to outside stalls, where animals are shifted to enjoy the sun.

Light was a big consideration in hospital design. The staff made sure there was a darker-colored wall in each room where animals can rest their eyes, just as they would do with shaded spots outdoors. "One of the things that all the wards have in common (except the warm room and cold room) is glass-block windows," adds Dr. Wallace. "With the glass blocks letting in light, animals sensitive to light cycles can maintain their natural cycles. If they breed or molt or shed antlers or fur in specific seasons, their cue is the length of the light. This is very important for breeding, especially for birds – and for some mammals."

Water is another big part of the hospital. Most of the animal-holding

stalls have showers. "For animals that like to bathe, you can turn the showers on and give the animal an opportunity to preen or clean. Tapirs, waterfowl and various other birds enjoy a sprinkle," says Dr. Wallace. Some of the stalls also have pools. The large room

used for the big cats (and also some birds) has a small pool that the tigers love, she says. Adds veterinarian Dr. Vickie Clyde: "The female swan enjoyed floating in this pool during the last days of her life. We brought in the male swan, Greg, to be a companion. The room was large enough so we could house them together." So she was not alone when she died.

When animals die, they need to have a necropsy, an exam to determine the cause of death. This is done by a veterinary pathologist from the School of Veterinary Medicine in Madison. Thanks to funding from the Zoological Society – about \$50,000 a year – a pathology fellow often is available to do necropsies at the Zoo (although the position remained vacant in 2007, and most necropsies were done in Madison). "We are one of only a handful of zoos that has a training program specializing in zoo and exotic animal pathology," says Dr. Wallace. "We have a showcase of a necropsy room. You can't attract people to a pathology program unless you have good facilities. The old hospital was inadequate. It was too small. It had no air conditioning in summer. It was not easy to clean. And it was a back breaker – we had to do some necropsies on the floor." The new hospital has a custom designed necropsy table and a room that's easy to clean and to ventilate.

Our Zoo's new hospital is so well-designed that people from other zoos, such as Toronto's and Atlanta's, have visited it to get ideas, says Dr. Wallace. But it's animals such as Monty, now able to see, that probably appreciate it most.

*By Paula Brookmire*



A rockhopper penguin



Note the wide window in the warm room to look for snakes.

Dr. Wallace shows the custom-designed necropsy table.





# They're Friends to Birds



Male scarlet tanager, a forest bird  
Photo by Timothy Fenske

Dick Nowacki (left) and Charles Shong manage the wetland owned by the Lake Pewaukee Sanitary District and allow the Zoological Society to study the many birds that visit or reside there. The wetland is a good spot for bird research.



A rare streak of red in the sky in mid-May – that's what Donna Meyer waits for at her Pewaukee home. It's not the sunset. It's a scarlet tanager migrating north. "I see the bright red zooming past," she says. "It just stops you in your tracks." Typically these brilliantly colored birds have stopped by the Meyers' yard only briefly, flying farther north to nest. But in the last decade, that vivid color lingered into late summer and early October as pairs of tanagers decided to nest on the Meyers' land. Perhaps it's a reward for the efforts that Donna Meyer and her husband, Tony, have made to make their land "bird friendly."

The Meyers have worked to preserve the diverse habitats on their land for years. So it was natural for them to agree to allow Zoological Society of Milwaukee (ZSM) researchers to study birds on their land. They joined 60 other private landowners and one government agency in Wisconsin and Belize participating in Birds Without Borders - *Aves Sin Fronteras*® (BWB-ASF). This is an international research-education-conservation project run jointly by the ZSM and its partner, the Foundation

for Wildlife Conservation, Inc. (FWC). The project studies birds that migrate (some between Wisconsin and Belize) as well as resident birds, and encourages landowners to put in plants and maintain habitat that helps birds survive.

BWB-ASF chose private instead of public land as its main focus because "private landowners control a majority of the land in the U.S., and they usually take pride in their land's upkeep, while public lands are really politically driven lands," says Dr. Gil Boese, founder of BWB-ASF, president of the FWC and president emeritus of the ZSM. Private landowners tend to pass down land – and a concern for conservation – from generation to generation. "Political properties come and go with administrations. You spend all that time and money on something, and then it's gone. I thought there'd be a possibility for a longer-term investment with private landowners."

The project itself grew out of a personal desire to preserve birds. One day in 1992, Dr. Boese sat on the deck of his Pewaukee home watching birds. He picked up a newspaper and saw an article about the decline of migratory birds. "The species they

were talking about were the same I was watching,” he says. “I thought, ‘If what they’re saying is true, then what I’m viewing and enjoying will disappear.’”

The experience triggered the memory of a trek through the Belizean tropical forest in Central America. Dr. Boese recalled seeing some of the same birds in Belize as he saw on his own property. He thought, “If we could get on both sides of the Neotropical equation, maybe we could see what makes it tick.” He wanted to study migratory birds in both their breeding grounds in Wisconsin and their wintering areas in Belize to find out what people could do to help birds. Thus he began BWB-ASF, turning to friends and neighbors, such as the Meyers, for support. He set four goals: 1) Do research to discover what habitats are important to birds, 2) apply the research results to conservation by producing guides on how to manage land to help birds both in Wisconsin and Belize, 3) educate children and adults about birds and 4) train Belizeans so that they could conduct further research independently and have an impact on conservation strategies.

Researchers set to work at three sites in Wisconsin – Pewaukee in the southeast, Rosendale in central Wisconsin and Land O’ Lakes in the far north – and at three sites in Belize. One Belize site is Runaway Creek Nature Preserve, a 6,009-acre property that the FWC bought in 1998 and turned into a wildlife preserve. In Wisconsin and Belize BWB-ASF workers used mist nets to gently catch birds for banding. They also searched for nests and counted all birds seen and heard. At Pewaukee, they analyzed fecal samples to see what the birds ate. They found that insects sustained many birds in spring; in the fall, birds supplemented their diets with berries and fruits. Red oaks and pussy willows are the biggest providers of insects, which give birds protein, but box elder, yellow bud hickory and highbush cranberry also provide insect food for birds during migration. Landowners can help migrating birds by planting these trees and managing the land so that these plants thrive, says Vicki Piaskowski, international coordinator for BWB-ASF. She

Vicki Piaskowski holds a common buckthorn leaf. This is a non-native (alien) species invading parks and private lands throughout Wisconsin, pushing out native species.



Dr. Gil and Lillian Boese (left) and their Pewaukee neighbors, Dr. Richard and Doris Bibler, walk in their forested land that's home to birds.



practices what she preaches in her own Wauwatosa yard by planting native plants such as dogwood and elderberry to provide fruits for birds, and white pine, hemlock and juniper, which provide shelter for birds.

Dr. Boese and his wife, Lillian, have planted in much the same way, with a particular emphasis on red oaks, which are disappearing in Wisconsin. “When I’m driving down Interstate 94 and I see a patch of oak trees, the next time I go by, it’s a shopping mall,” he says. He wraps oak sapling trunks with wire mesh in his otherwise naturally growing property to protect them from deer. Although the Meyers also let their land grow naturally, they have learned a thing or two from BWB-ASF and other conservation groups. The Meyers focus on eliminating alien species, such as buckthorn and honeysuckle, which choke out native plants. The Meyers also have BWB-ASF researchers to thank for discovering four scarlet tanager nests on their property in 1998.

Likewise, BWB-ASF can thank the Meyers and the other landowners for letting researchers gather enough data – since 1997 they have banded 10,140 birds just in Wisconsin – to produce guides that will teach other people how to make their yards or land bird-friendly. “We want to have a practical application to our research,” Piaskowski says. “This is where private landowners come in. We’re using what we’ve learned to provide information to help them manage their lands to help birds.” BWB-ASF published a free-of-charge, 106-page guide for Belize landowners in 2007 and will publish a free guide for Wisconsin



Zoological Society conservation project assistant Kari Williams holds a red oak leaf from a tree (in background) at the Milwaukee County Zoo.



Dr. Charles and Sonja Durkee walk in front of hickory trees, which provide insects for birds on their Pewaukee land.

Dr. Anthony and Donna Meyer stand in front of a box elder tree on their Pewaukee land. Birds eat insects found on box elders.



landowners in 2008. (Find the Belize guide on the ZSM Web site: [www.zoosociety.org/bzlandowner](http://www.zoosociety.org/bzlandowner). For tips on how you can help birds in Wisconsin, go to [www.zoosociety.org/wibirdtips](http://www.zoosociety.org/wibirdtips).)

Birds may be small creatures, says Piaskowski, but they can have large effects on the environment. Birds disperse seeds, pollinate plants and control pests. Many people appreciate birds for the beauty they bring to our lives. They are also considered indicators of environmental change. "If birds start declining, it indicates that something might be unbalanced in the environment or we are losing some important habitats," she says. For example, when the pesticide DDT became popular, some bird species declined dramatically. When scientists investigated, they found out how detrimental DDT was to some birds and their eggs. The chemical eventually was banned in the U.S.

The current decline in migratory birds isn't due to chemicals, but mainly to a loss in habitat. Donna Meyer has noticed: "Forty years ago we had many more birds, at least during the winter, and a variety of birds." In November 2007, the National Audubon Society and the American Bird Conservancy warned that nearly a third of American bird species "need immediate conservation help to simply survive." In June 2007, the Audubon Society reported that the populations of some of our most common birds had fallen by as much as 80%.

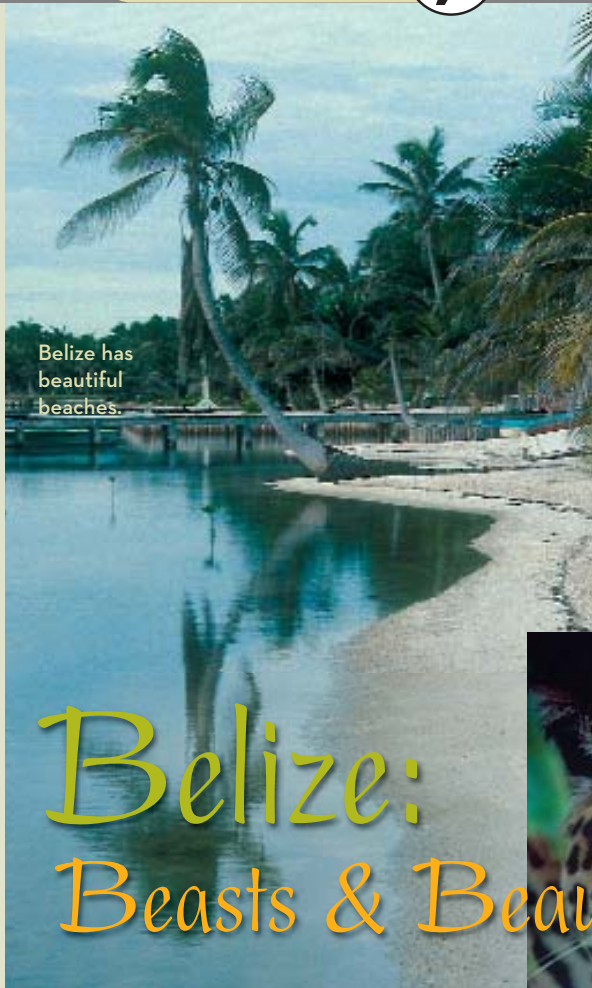
Although planting oaks and pussy willows in your yard to help birds find food during migration may seem a small step, Dr. Boese says these patches of bird-friendly land make all the difference. "It was thought that fragments of land were useless to the survival of a species," he says. "But I say fragments are all they have left in some places. And they're making use of these land fragments."

*By Erin Wiltgen and Paula Brookmire*

**Thanks to these Wisconsin landowners participating in Birds Without Borders-Aves Sin Fronteras®:**

Mr. and Mrs. Brian Bartling, Mary Beattie and the late Bud Beattie, Dan Beattie, Mr. and Mrs. Wayne Beattie, Dr. Richard and Doris Bibler, Dr. Gil and Lillian Boese, John and Judy Brennan, Dr. Charles and Sonja Durkee, Bill and Diane R. Emory, Brian and Dianne Henke, Brian and Debbie King, John and Raquel Koch, Dr. and Mrs. John Lindstrom, Mr. and Mrs. William Mateicka, Mr. and Mrs. Bob Meier, Dr. Anthony and Donna Meyer, Fred Ott, Mrs. Kenneth Rath and the late Kenneth Rath, Russ and Betty Schallert, Mr. and Mrs. M.J. Schmid, Susie Steinman and the late Richard Steinman, Dr. and Mrs. Jim Steinmetz, James Tiefenthaler, Jr., the late Mrs. Robert Uihlein, Jr., Charles Shong and the Lake Pewaukee Sanitary District.

**Note:** Only Pewaukee landowners are pictured on these pages because their land is the closest BWB-ASF research site to the Milwaukee County Zoo.



Belize has beautiful beaches.

# Belize: Beasts & Beauty

Jaguars. Howler monkeys. Rare tropical butterflies. Elegant storks. All of these animals and more are being protected in the Central American country of Belize with help from the Zoological Society of Milwaukee (ZSM) and its partner, the Foundation for Wildlife Conservation, Inc. (FWC). Now you can see some of these conservation projects as well as the beauty of Belize firsthand. The ZSM is offering a 10-day adventure trip to Belize next fall. This “eco-tourism” trip will feature everything from breathtaking beaches to nature hikes for viewing exotic wildlife. “The one thing about Belize is the variety of environments you can visit: rain forest, coastal beaches, islands, pine savannas, riverine forests and Maya ruins,” says Dr. Gil Boese, ZSM president emeritus and FWC president, who will lead the trip.

To be held November 5-15, 2008, this trip will be an upscale, small-group eco-tourism experience for adults and possibly families with older children. Ecotourism involves visiting nature locales that humans are trying to preserve, says Dr. Boese. Travelers will have the chance to visit wildlife sanctuaries and see animals ranging from green iguanas and crocodiles to terns and spoonbills. The trip also will offer outdoor activities for a variety of tastes and skills levels, including bicycling, hiking in the rain forest, horseback riding, nature walks and tours of Maya ruins and settlements. Travelers will enjoy staying in luxury hotels and rustic



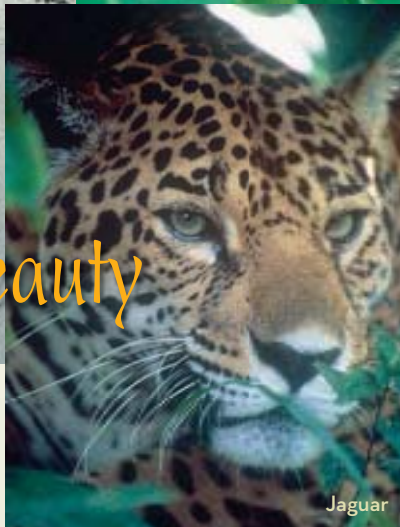
Tropical flower



Iguana



Roseate spoonbills



Jaguar

“eco-lodges,” comfortable cabins that blend into the natural setting. “If you’re looking to see a country that’s dedicated to the environment, Belize is a very interesting place to visit,” says Dr. Boese. “Forty percent of the country is devoted to protected nature reserves, national parks and islands.”

The adventure will begin in Belize City, the country’s seaport. The next day, travelers will head west to the Lodge at Chaa Creek Nature Reserve. This 320-acre private reserve offers activities ranging from mountain biking to canoeing, as well as day trips to the nearby Maya ruins at Xunantunich (a Maya city) or Cahal Pech Temple. The next two days will be in central Belize at the Belize Zoo and Runaway Creek Nature Preserve, a 6,009-acre wildlife sanctuary supported by the ZSM and owned by the FWC. The zoo, featured last summer on ABC news, is home to Belizean animals such as scarlet macaws, spider monkeys and jaguars. Runaway Creek, a research site of the international Birds Without Borders-*Aves Sin Fronteras*® (BWB-ASF) bird research-conservation-education project, offers excellent hiking trails and bird-watching opportunities. (BWB-ASF is run jointly by the ZSM and FWC.) The group also will have the chance to go canoeing or tubing on the nearby Sibun River. The last three days of the trip will introduce travelers to the country’s southern coast. They will stay at the Inn at Robert’s Grove on a peninsula with inviting beaches and options for snorkeling, scuba diving and visiting island bird rookeries.

The trip will cost about \$3,300 per person, double occupancy (including air travel). Prices and itinerary may change. For more information, please call (414) 258-2333.

By Julia Kolker



## Australian snake-necked turtle

Hatched: August 20, 2007  
Aquatic & Reptile Center

Can you imagine a snake's neck connected to a turtle's body? Believe it or not, there's an animal called a snake-necked turtle. Its long, snake-like neck makes up more than half of its body length. The Milwaukee County Zoo's latest hatchling, Binky, is the cutest baby reptile Craig Pelke, area supervisor of the Aquatic & Reptile Center, has ever seen. "It is all neck and head," Pelke says. The picture at left, with the tiny turtle crawling on fall leaves, shows just how small Binky was when it hatched. Adult Australian snake-necked turtles can grow to 9 to 13½ inches in diameter. After Binky's mother

laid the egg, it was removed from the parents' exhibit right away to be incubated. The exhibit can't duplicate the temperature, humidity and other conditions of nature, says Pelke. An incubator gives the egg a better chance at hatching. Australian snake-necked turtles are nicknamed stinkers in some areas because they create a strong odor when picked up or put in danger. These interesting turtles live in the wild in southeastern and eastern Australia. They swim in slow-flowing rivers and streams. Their diet is full of things found in the water: tadpoles, frogs, crabs and other crustaceans, and small fish. Zoo hatchlings are fed crickets, black worms, blood worms, or, for a change, prepared turtle pellets. The snake-necked turtle is a common species that is not in any danger in the wild. Binky may go on exhibit as his size increases or may go to another zoo. You can see his parents in the Aquatic & Reptile Center.

## Caribou/Reindeer

Arrived at the Zoo: Sept. 28, 2007  
Caribou / Reindeer Exhibit



Just before Christmas, Rosie the reindeer and her 6-month-old daughter, Kyllikki, arrived at the Milwaukee County Zoo. When the newbies were introduced to the Zoo's longtime caribou, Larry and Young Mother, with whom they share a yard, the youngster ran to greet the older animals. "The little calf was the first one to start interactions!" says Tracey Dolphin, the Zoo's curator of large mammals. "She is a very bold and inquisitive animal." Reindeer and caribou are two names for the same species, but it can be confusing what to call them. Originally reindeer referred only to these hoofed animals found in forests across northern Europe, Scandinavia, Russia, Mongolia and northeastern China, while caribou was the name for this species in the Arctic tundra of Alaska, Canada and Greenland. The subspecies of caribou and reindeer later interbred, says Deputy Zoo Director Bruce Beehler. Reindeer (made popular in Christmas songs) is now the North American term for domesticated animals of this species, but caribou is still used to describe these animals that run wild in North America. Zoogoers may notice subtle differences between the animals, says Dolphin. For example, reindeer are heavier and have shorter legs. Both reindeer and caribou have plenty of cold-weather adaptations: an excellent sense of smell to help find food, large hooves that spread apart for easy walking through snow and digging for food, antlers on both males and females for protection, and two layers of fur. A woolly layer next to their skin is covered by a coat made of straight, tube-like hair that captures and warms air. These nomadic animals migrate for hundreds of miles every winter in search of food. Good runners and swimmers, they can cover up to 50 miles a day at up to 48 mph. Rosie and Kyllikki will be outdoors all winter in their yard at the west end of the Zoo.

# Armadillos

Arrived at the Zoo: August 29, 2007  
Small Mammals Building

What's Gnu?



If you spot two scaly, cantaloupe-sized balls in a Small Mammals Building exhibit, you've just met the Milwaukee County Zoo's new southern three-banded armadillos, Zorro and Earth Mover. Native to South America, armadillos are small, nocturnal animals known for their hard shells that are covered with overlapping scales called "scutes." Armadillos curl up in a nearly impenetrable ball when they sleep, feel insecure or sense a predator. Armadillo even means "little armored one" in Spanish. Zookeepers hope that Zorro and Earth Mover will put down their armor this winter. The pair, which have produced one healthy offspring at another zoo, came to Milwaukee for breeding. Zorro and Earth Mover get along well: "They know each other; there's absolutely no aggression whatsoever," says Rhonda Crenshaw, Small Mammals Building area supervisor. Zorro

lives up to his name: This scaly male is very active and outgoing, adds Crenshaw. "He wants to see everything and inspect everything." His female companion, Earth Mover, "is more shy and reclusive. She likes to curl up in a ball." When armadillos are relaxed, they stretch out on their bellies. "Hopefully, we'll see a lot of that," says Crenshaw. If the couple come out of their shells, zoogoers may see a golf-ball-size offspring as early as this spring. Check out Zorro and Earth Mover in the night side of the Small Mammals Building. If you spot just one scaly critter, congratulations may be in order: Earth Mover is pregnant and enjoying some privacy off exhibit.

# Opossum

Arrived at the Zoo: Sept. 18, 2007  
Northwestern Mutual Family Farm

It looks like a rodent but is a cousin to the Australian kangaroo: Meet the Virginia opossum. This common backyard dweller is actually one of the few animals that is a marsupial – an animal that carries and nurses its offspring in a pouch. Despite its name, this animal is found throughout North America, including most of Wisconsin. Olivia, the Zoo's new opossum, came to the Zoo from the Wisconsin Humane Society's wildlife department. This summer, she will be featured in daily animal programs held at the Stackner Animal Encounter in the Northwestern Mutual Family Farm. Opossums in urban areas don't always have it so easy. They are hardy animals that can survive in a variety of habitats, but they often fall victim to humans and cars. When facing one of their many animal predators such as dogs, coyotes or badgers, opossums fall to their side, play dead and produce a foul-smelling mucus. They sometimes go into a catatonic state and take hours to wake up! Solitary animals by nature, they avoid confrontations and hide in trees and logs during daytime. At night, they scurry around looking for food and show off talents such as using their long tails like a fifth "hand" to stretch from branch to branch. Can't wait until summer to meet Olivia? Keep an eye out for the many wild opossums that live on Zoo grounds on your next visit.



# Alive

ZOOLOGICAL SOCIETY OF MILWAUKEE



## Leave Your Mark on the World!

Help the Zoological Society of Milwaukee with its Annual Appeal. Stake your claim to an animal-information sign on a continent in the Zoo. Or, leave your mark on a sign, tile or bench in the U.S. Bank Gathering Place, the new Zoo indoor entrance that will open in late spring. (See page 4 inside.)

See the insert packaged with this *Alive* to contribute to our Annual Appeal. Or, check our Web site at [www.zoosociety.org](http://www.zoosociety.org) or call us at (414) 258-2333. All donations are tax-deductible.\*