

# Alive



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- Flamingo Flair
- Meet the Bird Curator
- Saving Frogs & Polar Bears
- Stalking Jaguars



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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Birds are important to us. For many people, birds are beautiful to watch, and we have many colorful and endangered birds you can view here at the Milwaukee County Zoo. Birds also have cultural significance, such as eagle feathers used in ceremonies for some Native American tribes. Birds also eat pests that bother us, such as insects and rodents. They pollinate plants that would not grow otherwise. And, of course, birds are an early warning system about dangerous changes in the environment. So we're



happy to focus much of this issue of Alive on "Our Friends the Birds."

That "Friends" title just happens to be a section in a new bird guide that the Zoological Society of Milwaukee and its partner, the Foundation for Wildlife Conservation, Inc., have published this fall. The guide\* represents 11 years of research and data analysis conducted by our international project called Birds Without Borders-Aves Sin Fronteras® (BWB-ASF). This isn't just for scientists, however, even though there's plenty of technical information in this guide. The first part of the book is designed for the average reader and has all sorts of easy-to-read information on how you can help birds. They certainly need our help. In June 2007 the National Audubon Society reported that the population of some of our most common birds had fallen by as much as 80%. Last November the Audubon Society and the American Bird Conservancy warned that more than 25% of American bird species "need immediate conservation help simply to survive."

Many private landowners have voluntarily participated in our BWB-ASF project. Our new bird guide gives them tips about what they can continue to do - and what landowners everywhere in Wisconsin can do - to create more habitat that benefits birds. The guide is provided free online at [www.zoosociety.org/wilandowner](http://www.zoosociety.org/wilandowner).

Kids can get involved, too. Much of our Kids Alive in this issue focuses on how children can learn about birds and help conserve birds in their own back yards (pages 11-14). We also have a children's section on our Web site that shows them how they can help birds, all based on advice in our new bird guide.

Meanwhile, here at the Zoo we have a wonderful new curator of birds, Alex Waier. You'll find a profile of him in this issue (pages 6 and 7) as well as a list of all the places in the Zoo with birds on exhibit. Our newest bird exhibit, which Waier helped open in May, is the Idabel Wilmot Borchert Flamingo Exhibit and Overlook (page 8). It's great to have these colorful, elegant birds back at the Zoo, and we've featured them on the magazine's cover. In comparison, one of our longest-term bird exhibits, the Taylor Family Foundation Humboldt Penguin Exhibit, is featuring two chicks hatched this year. See a story in our What's Gnu section (page 22). You can look for wild birds at the Zoo on the Derse Foundation BWB-ASF Migratory Bird Deck overlooking Lake Evinrude (page 11).

The bird I'm featured with on this page is the bateleur eagle, which was part of a bird show in summer 2005. The eagle (no longer here) was the first animal to greet me when I first came to this Zoo. It's a magnificent bird.

*Robert Davis*

Dr. Bert Davis  
 Chief Executive Officer

\*Visit our free online bird guide, "The Birds Without Borders - Aves Sin Fronteras® Recommendations for Landowners: How to Manage Your Land to Help Birds (Wisconsin, Midwest and eastern United States edition)." Go to [www.zoosociety.org/wilandowner](http://www.zoosociety.org/wilandowner)

# Alive

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Dedicated Belizeans work with the Zoological Society and the Foundation for Wildlife Conservation, Inc., to help save endangered animals and land in this Central American country.

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Native to Belize, these mysterious and sacred big cats are the subject of ancient cave paintings and present-day research.

## 22 *What's Gnu*

Meet the youngsters: kudu, Humboldt penguin, impala and Baird's tapir.

## KIDS ALIVE 11-14

Go online to see our new bird guide, try fun activities featuring migratory birds, and learn how one school helped a tropical forest.

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

**ON THE COVER** A flamingo at the Zoo. See page 8.



## REINDEER GAMES

Wintry reindeer are the perfect symbol of the holiday season. **This year you can sponsor Kyllikki, a reindeer at the Milwaukee County Zoo.**

The \$35 sponsorship package includes a plush-toy reindeer; information about these hooved animals (called caribou in North America and reindeer in Europe when found in the wild); an

invitation to Animal Safari, an annual behind-the-scenes event for animal sponsors at the Zoo; an animal sponsor decal and gift card; and more.

To give a reindeer package, go online at [www.zoosociety.org](http://www.zoosociety.org) and click on the reindeer picture to order by credit card; or call our office at (414) 258-2333.



Proceeds from the Sponsor an Animal program help all of the animals at the Milwaukee County Zoo.

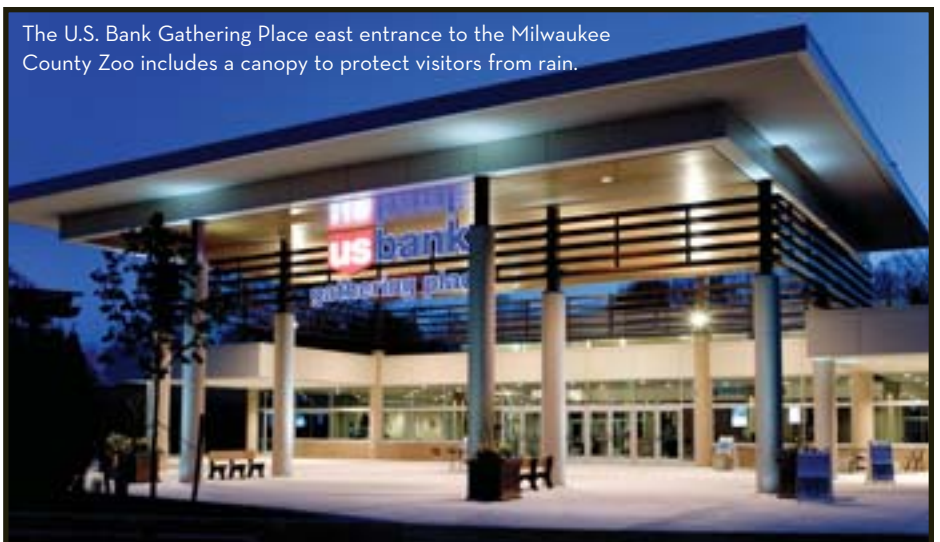


# Hats off to a New Zoo



Standing in front of the new Zoo entrance at a premiere May 8 are representatives of U.S. Bank. In the back row (from left) are Betty Frey (retired), Senior Vice President Chris Collier; Executive Vice President Dale R. Smith; Bill Bertha, president of U.S. Bank-Wisconsin; and Senior Vice Presidents Robert Webster and Tom Richtman. In front (from left) are Christine Strauss (retired); Vice President Caroline Krider, a Zoological Society of Milwaukee director; Vice President Laurie Ocepek; and Senior Vice Presidents Lynne LaRosa, Lisa Glover and Lynn Richtman.

For seven years the Milwaukee County Zoo has been changing before your eyes. The big cats and giraffes and macaques and impalas got new homes, all the animals got a wonderful new hospital, Zoo visitors got a new restaurant, and children got a new farm and an eight-classroom school on Zoo grounds. The final project, the U.S. Bank Gathering Place, opened in May. The Gathering Place, an airy new indoor entrance to the Zoo, replaces an open plaza. It's a great place to start a Zoo visit and a fitting end to the New Zoo II Capital Campaign. Through nine projects, more than 25% of the Zoo has been improved dramatically with new buildings and remodeled exhibits. For this \$30-million-plus, public-private campaign, the Zoological Society of Milwaukee (ZSM) raised \$15,513,958 in cash and pledges as of July 2008 – well more than a half-million beyond what the ZSM originally pledged to raise. Milwaukee County provided about \$15 million, the public half of this campaign.



The U.S. Bank Gathering Place east entrance to the Milwaukee County Zoo includes a canopy to protect visitors from rain.

Bill Bertha, president of U.S. Bank-Wisconsin, and other VIPs cut the ribbon to open the U.S. Bank Gathering Place May 8, 2008, during the Platypus Society/VIP premiere of the building. The Platypus Society is the ZSM's highest level donor-recognition group. The new entrance was made possible by a major contribution

from U.S. Bank plus donations to the Zoological Society's Annual Appeal. Now when you enter the atrium, electronic information screens sponsored by U.S. Cellular give you immediate information on what's happening at the Zoo. A Guest Services desk can tell you what not to miss during your visit. The 29,548-square-foot space also has an upgraded restaurant, a counter-style snack bar, two gift shops, counter windows for Zoological Society purchases, an entrance to the Zoo receptionist, animal photos by ZSM photographer Richard Brodzeller, and remodeled offices for the ZSM and some of the Zoo administration areas. The building's east entrance (from the parking lot) features gardens and a Zoo photo-opportunity station designed and provided by Hawks Nursery. As you head out the west doors into the Zoo, you're greeted by new gardens provided by the Elizabeth Elser Doolittle Foundation.

So next time you're at the Zoo, make sure you visit all its new areas. Here are the nine capital campaign projects and their completion dates:

- **Holz Family Impala Country:** June 2001
- **Lakeview Place restaurant:** summer 2002
- **Macaque facility and viewing deck**, which included the Carl & Ruth Gosewehr Macaque Island remodeling: June 2002
- **Animal Health Center**, which included the Holz Family Foundation Learning Zone: fall 2003
- **Karen Peck Katz Conservation Education Center:** September 2004
- **Northwestern Mutual Family Farm:** June 2005
- **Florence Mila Borchert Big Cat Country:** July 2005
- **Miller Brewing Company Giraffe Experience:** July 2006
- **U.S. Bank Gathering Place:** May 2008

-By Paula Brookmire

Wisconsin flowers are part of the Elizabeth Elser Doolittle West Garden at the west entrance to the Gathering Place.

Standing in front of the Zoo's new U.S. Bank Gathering Place are (from left) Milwaukee County Zoo Director Chuck Wikenhauser; Milwaukee County Executive Scott Walker; Zoological Society Board chair Karen Peck Katz; and Dr. Robert Davis, Zoological Society president and CEO.



## Thanks to Special Donors to the New Zoo II Capital Campaign for the U.S. Bank Gathering Place

- U.S. Bank gave the lead gift.
- Zoological Society Annual Appeal donors helped complete the project (recognition will be installed by mid-December 2008).
- Hawks Nursery provided landscape design and plants.
- The Elizabeth Elser Doolittle Foundation provided new gardens at the west entrance.
- Forward provided funds for the atrium.



Two men instrumental in making possible the new U.S. Bank Gathering Place are Jack McKeithan (left), capital campaign chairman and president of Tamarack Petroleum Co., and Dr. Gil Boese, Zoological Society president emeritus and capital campaign project manager for the new Zoo entrance.



Joe and Jennifer Kresl of Hawks Nursery donated landscaping and plantings for the new entrance. Joe is a Zoological Society director.

# Waier's World of Birds



Caribbean flamingo

The peacocks are a work of art. The penguins have personality plus. The flamingos are a flash of pink. The Guam rails are nearly extinct. And Alex Waier? He seems to fit right in with this fascinating world of feathered and flying – and sometimes swimming – creatures. As he says, it takes a certain personality type to love birds enough to care for them daily and put up with their sometimes strong odors, their tendency to poop in flight, and their diet

of insects or smelly fish. Waier, the new bird curator at the Milwaukee County Zoo, knows this world. He has been caring for birds for more than 20 years.

He loves their incredible variety. “Bird species are so different. Some penguins, like the Humboldts, can live in a wide variation of temperatures. Others, such as the kings and rockhoppers, do better in a constant cold environment with a small range in temperature.” He’s enticed by their mysteries. “There’s always something to learn. With almost 10,000 bird species in the world, if you learn a new species every day, it would take you almost 30 years.” He never gets bored. “There are always challenges. Let’s come up with a new nest design for the gray-winged trumpeters. Find a way to protect the flamingos’ feet. Some species are high-strung. Some are hard to breed.”

Last February Waier left about 1,500 birds he was managing at SeaWorld in Orlando, Fla., to come to Milwaukee with wife Robin, two children, two dogs and a cat. He arrived in a snow-storm. “I will never forget it. There was three feet of snow on the ground. Snow was banked on either side of my driveway. I felt like I was driving through a chute.” (Waier’s predecessor, Kim Smith, who left in 2007 for Chicago’s Brookfield Zoo, also arrived here from the warm South to be greeted by a winter storm.)

So why Milwaukee? Says Waier: “We’re extremely dedicated here at this Zoo to the conservation aspect of animal care and to the associated environmental conservation, which appeals to me.” While Milwaukee has 336 birds (compared to SeaWorld’s 1,500), the Zoo has a lot of variety (74 species), from spangled cotingas to wattled currasows, from fairy bluebirds to Bali mynahs. At SeaWorld he had 200 penguins and 250 flamingos, among other birds. In Milwaukee he has 23 penguins. He started with just over a dozen flamingos and supervised the opening of a new flamingo exhibit last spring. “The birds get more individualized care here because of the smaller collection. The keepers know the birds as individuals rather than as flocks.”

Waier also finds the Zoo’s Herb & Nada Mahler Family Aviary exciting. Why? “The size. It’s a treat to work in an indoor area of that space, especially the free-flight exhibit. It gives people the chance to appreciate the birds in flight. And the natural skylight component is great for breeding.”

Yet there are birds on exhibit throughout the Zoo, and Waier makes daily rounds to check with area supervisors such as Lisa Guglielmi in



On daily rounds in the Northwestern Mutual Family Farm, Waier pets Chelsey the donkey while talking with staff Katie Lagerman (left) and Shannon Bartley.

the farm and Dawn Wicker in Winter Quarters (which includes animals from the African Savanna and African Waterhole).

Besides the aviary, the Zoo’s bird collection can be found in the:

- **African savanna (Holz Family Impala Country):** five cinereous vultures and an African ground hornbill named Hornrietta who’s 26 years old
- **African Waterhole Exhibit:** a marabou stork and an ostrich
- **Australia Building:** two emus
- **Crested Screamer Exhibit** near Macaque Island: two birds
- **The Idabel Wilmot Borchert Flamingo Exhibit & Overlook:** a flock of Caribbean flamingos
- **Moose Exhibit:** Bob the turkey roams that yard
- **Northwestern Mutual Family Farm** (which Waier also manages): ducks, a screech owl, Cochin chickens, and a rooster. In summer the farm also includes a raptor show, although the birds of prey are not in the Zoo’s collection. Raptors that used to be in the Zoo’s collection were donated to the World Bird Sanctuary, which now runs the show.

Bird curator Alex Waier radios staff from the flamingo yard.



Guam kingfisher



Blue-crowned mot mot

Waier is in charge of the Zoo's 336 birds from 74 species.

- **South American Exhibit:** a king vulture named Tut
- **Trumpeter swan pond** in front of the aviary: a swan pair
- **Wong Family Pheasantry:** Torch the endangered whooping crane and two silver pheasants
- **Zoo grounds anywhere:** 36 peafowl (peacocks and peahens) roam where they please

Waier is also happy to be at a Zoo with a reputation for successfully breeding highly endangered birds such as Guam kingfishers and Guam rails. These two species are the most highly endangered birds on the planet. "We have the oldest kingfisher in the world," says Waier. "He is 21 years old."

Among the Zoo's successful bird hatchings this year were two Humboldt penguins (see story on page 22), three red-billed hornbill chicks, a green-naped pheasant pigeon,

three aracari, five Madagascar teal, four hooded merganser ducklings, three mot mots, two Abdim's (white-bellied) storks, and two Waldrapp ibis.



Above: "We come to the Zoo at least every other week," says Robin Waier. Daughter Isabel, 3, and son Cameron, 1, love visiting their dad, Alex Waier, but they prefer fish to birds.

Looking to the future, Waier hopes to bring in more flamingos (by transporting eggs to hatch here),



remove rocks in the flamingo yard so the terrain is easier on their feet, possibly bring in another species of penguin such as the gentoo, and acquire once-endangered brown pelicans for the Zoo's collection. He also plans to continue encouraging his staff in their special interests. Carol Kagy, area supervisor for birds, is the kingfisher specialist. Bryan Kwiatkowski in 2007 flew to Guam and assisted in the release of three Guam rails raised at our Zoo; they were released on the Pacific Island of Rota (two more Guam rails came to the Zoo last spring). Mike Frayer manages the East Flight exhibit and participates in a state-wide bat-management plan. Heather Neldner participates in piping plover conservation projects and trains the Zoo's Mauritius pink pigeons. Katie Poggenburg cares for the flamingos and cold-weather penguins. Christine Buch was heavily involved with hatching and rearing of trumpeter swans.

Meanwhile, Waier reminds visitors that birds aren't just beautiful. "They're a barometer for the environment, a kind of overall health indicator." When birds start disappearing from the wild, that's a warning signal to humans. Protecting penguins, for example, eventually may protect us.

-By Paula Brookmire

# Fall color: flamingo pink

*The flamingos congregate in front of their new home, which is to the back of their pond.*



*If you watch long enough, you'll often see the birds go head to head or stand on one leg.*

The scene could be from a Japanese painting. Viewing the flamingos from afar, you see a willow tree draping over a picture-perfect pond, with the stately pink birds in the background. But have you ever gone eye to eye with these long-necked birds? The Milwaukee County Zoo's new flamingo exhibit, the Idabel Wilmot Borchert Flamingo Exhibit and Overlook, gives zoogoers a close-up look at the flashy Caribbean flock. At the exhibit's VIP premiere last spring, the birds made a beeline to the visitor walkway, much to the delight of the guests. Flamingos may look aloof and elegant from a distance, but from an arm's length, they're a hoot: honking, posturing and yoga-like poses abound. Located between the Animal Health Center and the Herb & Nada Mahler Family Aviary, the exhibit features a tree-lined yard surrounding a koi-filled pond, signs featuring flamingo facts and a spacious building for housing and feeding the birds. Eventually there will be an overlook. More than 258 guests at the May 22 exhibit premiere had the chance to tour the building (normally off limits to zoogoers) and admire its sparkling kitchen for preparing the birds' food. The facility includes air vents and filters for circulating fresh air and even a porch enclosed in predator-proof mesh so the birds can go out at night. Although Caribbean flamingos live in warm climates, they're cold-tolerant birds that may enjoy the outdoors year-round once they adjust to the Wisconsin climate. Stop by their yard this fall: You could catch the pink birds strutting their stuff against a background of golden foliage.

*-By Julia Kolker*



An April 2008 Seals and Sea Lions classroom looked like it was under water.



A classroom became a moose-habitat forest for an April 2008 Alaskan Adventures class.

# CLASSROOMS COME TO LIFE

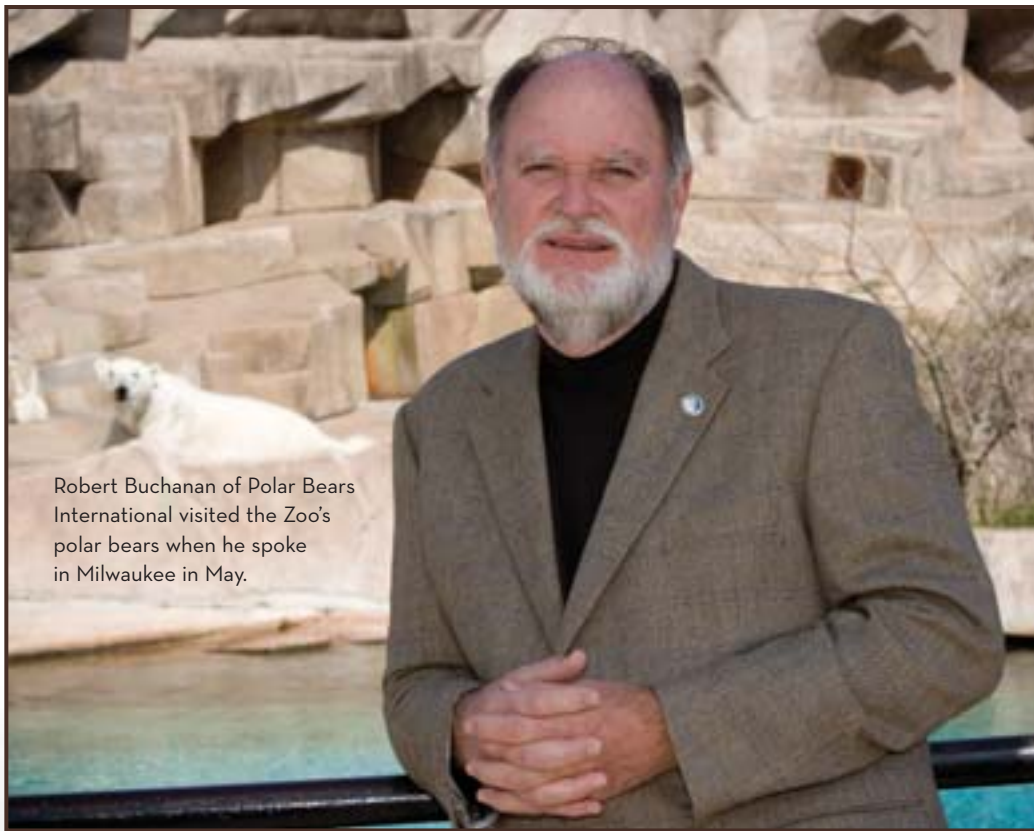
A girl tromps on all fours through the “tundra” while a boy fishes for trout in a nearby “river.” With a green “forest” on one wall and bright “northern lights” on the other, a Zoological Society of Milwaukee (ZSM) Alaskan Adventures classroom looks more like a woody retreat than an educational experience. ZSM educators go to great lengths to create these room environments to enhance learning for children. For this class last spring, it took Kristin Ziarnik two days to construct four Alaskan landscapes: mountains, forest, tundra and ocean. Ziarnik, who has taught for the Zoological Society for three years, says it’s worth the work. “I heard parents saying, ‘Let’s go check out the forest,’ and, ‘Let’s see what we can do in the mountains,’ which is exactly what we want: to be able to explore different habitats. They absorb the landscape. With just plain walls, that would not have come across.” Creating visual habitats also saves time, Ziarnik says. “We could never get to the animals if we spent the whole time talking about the habitat.”

How did Ziarnik create the northern lights? She put black paper over a wall, poked holes that let light shine through a window, and used multi-colored cellophane for the shimmering lights. Each landscape represented an animal they studied in class, such as moose on the tundra or whales in the ocean. Classes often focus

on one animal, but this class covered several. “We unified them by habitat,” says Ziarnik. “It helps children grasp the concept that much easier.” Hands-on activity stations on the perimeter of the room included painting the northern lights, coloring fresh-caught salmon from a paper “river,” and making paper moose antlers. In many classes children create animal costumes or play games that teach them about animal behavior.

Why do Zoo educators put so much effort into creating such detailed decorations? “The room environments allow children to immerse themselves in the habitat as if they were the animal,” says Patty Trinko, the Zoological Society’s assistant director of education. So the girl tromping through the tundra searching for food would wear moose antlers and pretend to be a moose. It’s like the idea: Walk a mile in my shoes to understand me. The kids walk on all fours, like a hoofed animal, or pretend to swim, like a fish. Adds Ziarnik: “The habitats are a unique experience. Creating them allows our imagination to go wild. And, it’s rewarding for the kids.” Children and adults alike – many of whom sign up for a class each month – wait to see how extravagant next month’s classrooms will be, Ziarnik says. “They know a Zoo class is different from their school or daycare. At the Zoo, children can go spelunking or even explore a polar bear den right in the classroom.”

-By Loni Luna



Robert Buchanan of Polar Bears International visited the Zoo's polar bears when he spoke in Milwaukee in May.

in trouble. In May 2008, the U.S. Department of Interior classified the polar bear as threatened under the Endangered Species Act.

Native to parts of Alaska and the northern regions of Canada, Denmark, Norway and Russia, polar bears face threats such as pollution, poaching, drilling and mining, hunting, and, say many researchers, climate change. Some scientists have noticed that ice – critical to bears for hunting, locating mates, breeding, setting up maternal dens and caring for the young – has receded faster than usual in the last 15 years. This makes it hard for polar bears to find food and reproduce successfully in the harsh, arctic environment, says Buchanan. According to the U.S. Geological Survey, the world's current polar bear population of 20,000 to 25,000 animals could decline by nearly two-thirds by 2050.

Despite the challenges facing polar bears, everyone can do simple things to help these creatures and the Earth as a whole, Buchanan says. They include driving slower – cars driven under 60 mph produce fewer harmful carbon dioxide gases (which have been linked

to climate change); planting trees, which help reduce carbon dioxide in the atmosphere; buying recycled products; and encouraging kids and teens to conserve the Earth's resources.

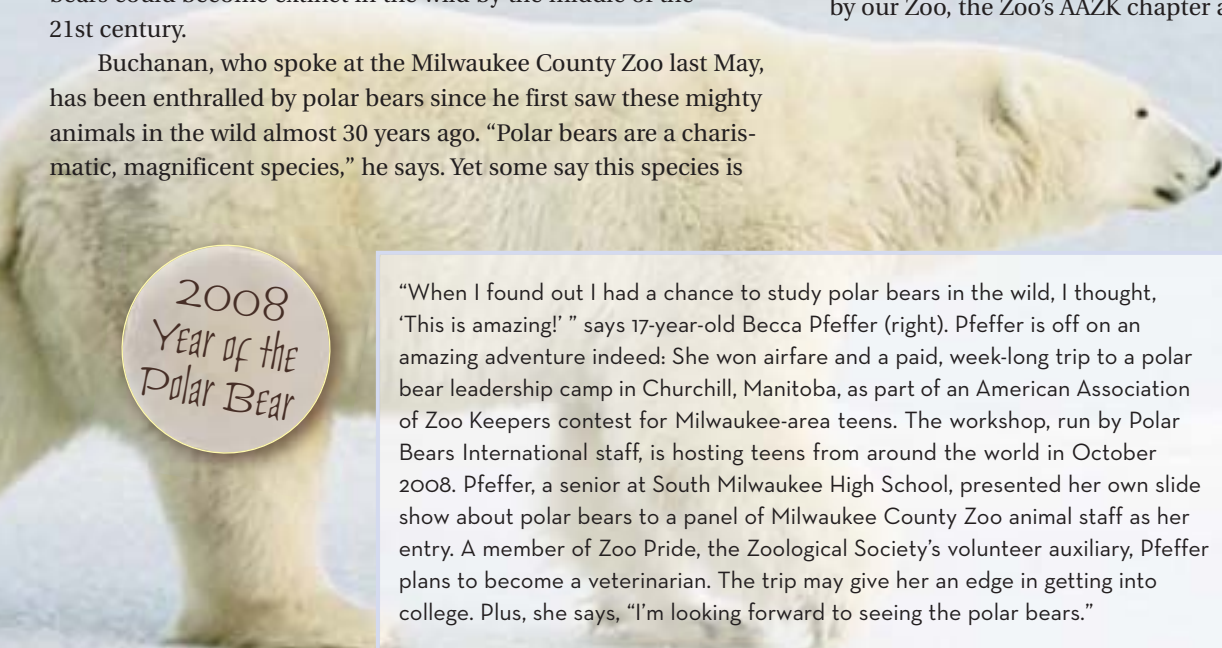
The Year of the Polar Bear also features programs at about nine zoos throughout the country. An upcoming program at our Zoo is a polar bear birthday party in December starring the Zoo's own polar bears: Zero and Snow Lilly. Buchanan's talk was co-sponsored by our Zoo, the Zoo's AAZK chapter and PBI.

-By Julia Kolker

# On Thin Ice

Polar bears are famous for their size, their unique adaptations to cold climates and their reputation as fierce predators. They're also known for their struggle to survive in a changing Arctic. That's one reason why the American Association of Zoo Keepers (AAZK) and Polar Bears International (PBI) declared 2008 the "The Year of the Polar Bear." According to Robert Buchanan, president of PBI, a group that supports polar bear conservation and research, polar bears could become extinct in the wild by the middle of the 21st century.

Buchanan, who spoke at the Milwaukee County Zoo last May, has been enthralled by polar bears since he first saw these mighty animals in the wild almost 30 years ago. "Polar bears are a charismatic, magnificent species," he says. Yet some say this species is



2008  
Year of the  
Polar Bear

"When I found out I had a chance to study polar bears in the wild, I thought, 'This is amazing!'" says 17-year-old Becca Pfeffer (right). Pfeffer is off on an amazing adventure indeed: She won airfare and a paid, week-long trip to a polar bear leadership camp in Churchill, Manitoba, as part of an American Association of Zoo Keepers contest for Milwaukee-area teens. The workshop, run by Polar Bears International staff, is hosting teens from around the world in October 2008. Pfeffer, a senior at South Milwaukee High School, presented her own slide show about polar bears to a panel of Milwaukee County Zoo animal staff as her entry. A member of Zoo Pride, the Zoological Society's volunteer auxiliary, Pfeffer plans to become a veterinarian. The trip may give her an edge in getting into college. Plus, she says, "I'm looking forward to seeing the polar bears."



# get the word ON birds

# Kids ALive

They travel thousands of miles every year without a highway or map, and many weigh only as much as a few pennies! Make way for migratory birds. They spend our summertime in the United States, Canada and northern Mexico. In fall, they head down to toasty climates for the winter so they can find food. That's called "migrating," or moving from one place to another when the seasons change. This October, how many birds can you see winging it to their winter homes? Ask your parents for binoculars (or even opera glasses) and take them outside for a closer look at these traveling birds. You might see a V-shaped flock of Canada geese in the sky or a robin stopping for a berry snack.

But there's a lot more to learn about these birds and their thrilling journeys. You can find out in our new bird guide at the Zoological Society's Web site: [www.zoosociety.org/wilandowner](http://www.zoosociety.org/wilandowner).\* Go to the sections "Our Friends the Birds" and "How You Can Help Birds." You'll learn why birds are important and why many are in danger.

This book is filled with more than 300 colorful photos of birds, the habitats they like and the food they eat. Do you know what a common yellowthroat looks like? How about a rose-breasted grosbeak? Look at Appendix 1 to learn where you can find a bird's picture and print out that page. Then search for pictures of birds' favorite foods, from leafhoppers to blackberries. How many beaky treats can you find in your neighborhood? Print out a section called "What Do Birds Eat During Migration?" and start searching.

Sadly, some Wisconsin birds, like the hooded warbler, are in danger. But you can give your "bird buds" a helping wing. For fun tips on how to fix a few songbird snacks (Baltimore orioles like oranges!), turn to our "Feathered Fun" activity page: [www.zoosociety.org/funstuff](http://www.zoosociety.org/funstuff) and select Birds. Here you'll also learn how to create bird decorations for your family's windows. That way, birds won't hurt themselves by flying into your windows (they can't see the glass).

Before you know it, you will be a bird expert. With pictures from our online guide, you can point out your favorite birds (and their yummy insect food) to your friends. Think you've got the word on birds? Turn the page and put your new knowledge to the test!



Yonina Skier, 7, of Milwaukee looks for migrating birds at the Milwaukee County Zoo.

-By Perel Skier

\*Visit our free online bird guide, "The Birds Without Borders-Aves Sin Fronteras® Recommendations for Landowners: How to Manage Your Land to Help Birds (Wisconsin, Midwest and eastern United States edition)."

While the back parts of this book are directed to researchers, the first sections are written for anyone who loves birds.

# ON THE WING

**ARE YOU A BIRD BRAIN?** Thousands of birds migrate each year. They leave wintry Wisconsin for sunnier - and buggier - places. As you learned on the first page of *Kids Alive*, many kinds of birds make the trip, from hummingbirds to hawks. Each has its own special tools to help it along the way. Try the activities on these pages to “get brainy” about just a few of our bird buddies. Then visit our Fun Stuff Web site at [www.zoosociety.org/funstuff](http://www.zoosociety.org/funstuff) for more activities. Go to Cornell University’s All About Birds Web site for even more fun facts: [www.birds.cornell.edu](http://www.birds.cornell.edu).



## Neat beaks

Every bird has just the right beak shape for the food it eats. Match the numbered beak shapes to their lettered names below.

- A. Cracker** Squat, pointed beaks can crack seeds.
- B. Shredder** Birds of prey need sharp, hooked beaks to rip meat into bite-size pieces.
- C. Probe** Long, slim beaks fit inside flowers so birds can drink nectar.
- D. Chisel** Hard, nail-like beaks hammer into tree trunks to reach insects inside.

## Migration Maze

Birds must watch out for cats and other predators and rain when they migrate. Can you help this ovenbird get to Central America safely? She must eat spiders and insects and rest along the way.



# egg HUNT

Which egg belongs to which of these four migratory birds?  
Using clues next to the numbered eggshells, match each egg to its parent. Write in the letter of the bird next to the number of the egg.



USFWS/Donna Dewhurst photo

**A**

Yellow-rumped warbler

- \* Alexander Wilson named me for the state where he saw me during migration in 1832.
- \* I'm a no-good "nectar thief." I drink flowers' nectar without spreading their pollen to other flowers.
- \* Favorite foods: caterpillars and spruce budworms in summer; in winter, fruit, nectar and insects. Yum!

**2**

- \* My arrival is a sign that spring is near!
- \* My song sounds like, "Cheerily, cheer up, cheer up, cheerily."
- \* I eat mostly insects and earthworms in spring and insects and fruit in winter.

**B** Hermit thrush

**3**

- \* A part of my body is bright yellow.
- \* My song is a slow trill that rises or falls at the end.
- \* Unlike most birds, I can digest waxy fruits like bayberries. That allows me to winter in places too cold for bugs.

**C** Tennessee warbler

**4**

- \* West of the Rocky Mountains, my nests are in short trees. East of the Rockies, I make nests on the ground.
- \* I dig through leaves to find tasty insects and spiders to eat.
- \* I spend the winter in the United States and Mexico.

**D** American robin



USFWS/Dave Menke photo



USFWS/Dave Menke photo



Robb Quinn photo

Nest Beak Answers: A-1, B-3, C-2, D-4

## Students Stretch a Dollar

When 127 Greenfield Middle School seventh graders decided to save part of a tropical forest, they found out how far a dollar could go. Their dollars went all the way to Central America. Donna Zolinski-Stevens, their biology teacher, showed them a brochure for the Save an Acre program. The Zoological Society of Milwaukee runs this program to support Runaway Creek Nature Preserve in the Central American country of Belize. The wildlife preserve includes large areas of tropical forest. "I wanted the children to explore the impacts of land preservation," says Zolinski-Stevens. She also wanted them to do something personally to help keep rain forests safe from pollution and destruction. So one day last January she asked, "What do you think? If we all contributed one dollar, we could save one acre of land."

Even the teacher was amazed by what happened next. Determined to make a difference, her students spent two weeks raising money. They wrote a letter to the student council asking it to match the money they raised (it matched up to \$200). They created school-wide audio announcements inviting all students to pitch in. They decorated a container to collect money. They kept track of their progress on a school bulletin board. Each student thought carefully about how to spend money during a field trip to Southridge Mall. "Several students came up to me and said, 'I didn't buy such-and-such because I wanted to save some money for the rain forest,'" recalls Zolinski-Stevens.

"Our class learned that rain forests have been decreasing over the years, and it was time to do something about it," says student Sarah Habermehl. Her grade raised and donated \$750 to Save an Acre. Dr. Gil Boese,\* creator of the wildlife preserve, thanked the students with a visit to the school last March. He answered questions about animals on the preserve, such as jaguars and rare birds. "Afterward, the students begged me to take them on a field trip to Belize," laughs Zolinski-Stevens.

"We've learned that if you conserve rain forests like the one in Belize, it will be off limits to people who want to cut them down," says Sarah. Why is this important to animals? Rain forests are home to many endangered animals. "And there are some animals we haven't even discovered yet!"

*-By Perel Skier*

Photo by Becky Luft



Dr. Gil Boese, president emeritus of the Zoological Society, holds up a check for \$750 raised by 127 seventh graders at Greenfield Middle School. Donna Zolinski-Stevens (back row, right) and her students donated the money to the Zoological Society's Save an Acre program.



**SAVE  
AN ACRE**  
RUNAWAY CREEK  
NATURE PRESERVE

\*Dr. Gil Boese is president of the Foundation for Wildlife Conservation, Inc., which owns Runaway Creek Nature Preserve, and is president emeritus of the Zoological Society of Milwaukee (ZSM). For more information about the ZSM's conservation programs, go to [www.zoosociety.org/conservation](http://www.zoosociety.org/conservation).

# Head Start on Life



Two dozen fist-sized turtles cuddle under layers of soft moss in a small, warm room at the Milwaukee County Zoo. One morning late last May, Chad Pappas, an Aquatic & Reptile Center (ARC) zookeeper, gently checks the reptiles to make sure they're healthy, fluffs up their bedding and sets out softened food pellets. This cozy scene is conservation in action. These are ornate box turtles, and they're highly endangered in Wisconsin and threatened throughout the Midwest. Pappas, along with colleagues at the Zoo and the Wisconsin Department of Natural Resources (DNR), is giving these vulnerable reptiles a head start on survival in the wild.

Once common in central Wisconsin, ornate box turtles are plummeting in numbers. Their native dry, prairie habitats are disappearing thanks to road construction and irrigated farmland. They're target for poachers who sell them as pets. Plus, box turtle eggs and youngsters often fall victim to predators such as coyotes, opossums and even birds. In fact, says Craig Berg, the Zoo's aquarium and reptile curator, nearly all turtles are eaten before they reach maturity (which takes at least a decade). In the early 1990s, the DNR in Madison surveyed box-turtle habitats and found very few or no turtles in places where they used to thrive. Since 1996, the DNR and the Zoo, with funding from the Zoological Society of Milwaukee, have raised the turtles in captivity until they're big enough to withstand the dangers of the wild. "We

Photo by Chad Pappas



want to bolster the population by putting out large turtles that are predator-resistant," says Pappas.

It works like this: In early summer, Pappas and DNR herpetologists collect turtle eggs in the fields of southern and southwestern Wisconsin. The gathered eggs are incubated and hatched at the DNR in Madison and at Pappas' house, and then sent to the Zoo. Here, they thrive in a safe, warm environment, off exhibit (a controlled atmosphere helps them grow faster). At 10 months old, the turtles are 3 to 4 inches in diameter, as big as 3- to 6-year-old turtles in the wild. In late spring, the young turtles are released back into their native habitats. Larger turtles have a better chance of long-term survival because they're likely to evade predators, Pappas explains. In fact, these hardy animals are even known to survive fires by burying themselves in sand.

Why worry about these unassuming reptiles? "Ornate box turtles are barometers for the surrounding ecosystem," says Pappas. They're uniquely adapted to Wisconsin's environment. Seeds that box turtles disperse with their droppings are essential to growing native plants such as prickly pear cactus. Box turtles also feed on worms and insects. When turtles start disappearing, chances are that local plants and animals are in trouble as well.

No one knows how many ornate box turtles are in Wisconsin today, but "this head-start program bolsters the box turtle population," says Berg. More than 600 turtles have been released into the wild since the program began; the Zoo has raised 237. In years past, researchers have radio-tracked some turtles and observed survival rates higher than 90%. (Radio-tracking isn't done every year; instead, turtles get a small, permanent notch on their shells to alert future researchers to captive-born animals.) The program is scheduled to run through 2012, when researchers may have better estimates of box-turtle numbers. They also may know if captive-raised turtles are reproducing in the wild. Pappas is cautiously optimistic: "For the most part, the program has been very successful." It helps maintain a healthy ecosystem and gives these oft-overlooked turtles a leg up on survival.

-By Julia Kolker



Photos by Chad Pappas



Photo of Chad Pappas  
by Richard Brodzeller

Chad Pappas helped release 97 box turtles into the wild last June (above); 24 were raised at our Zoo and the rest at the Racine Zoo and by other conservationists. Pappas also collected 104 eggs (left) that hatched and he's now raising.



# frogs fighting



Frogs: They hop, they leap, they eat mosquitoes...and they're going extinct. Nearly one-third of all frogs – and other amphibians – could disappear this century, says the Association of Zoos and Aquariums (AZA). That's the largest mass extinction since the dinosaurs! AZA has even declared 2008 as the Year of the Frog. Why the fuss about frogs? Frogs eat insects and some produce poison that's used to develop medicines for diseases such as cancer and Alzheimer's. Amphibians serve as the proverbial canary in a coal mine. They're the first species to go when something's off in the environment, be it pollution, habitat loss or a deadly fungus (see Fungus Fear story).

What exactly is an amphibian? It's an animal that hatches from an egg and begins its life in the water. As it grows, an amphibian develops land-animal traits such as legs and spends more time on dry ground. In fact, amphibian is Greek for "both lives." The amphibian family ranges from the well-known frog to the mysterious, eel-like caecilian. Celebrate these vital creatures with a tour through the Milwaukee County Zoo's Aquatic & Reptile Center (ARC). This building is home to 11 amphibian species; two (Grenada frog and hellbender) are in peril; nine\* may be vulnerable. On these pages, we introduce you to the Zoo's frog collection (not including the American toads used in education classes).

## making history

The Grenada treefrog made history in 2006 at the Milwaukee County Zoo, where it laid eggs for the first time ever in captivity. Craig Berg, the Zoo's reptile and aquarium curator, wants to protect these frogs from the deadly chytrid virus that has exterminated other frog species around the globe. Hurricane Ivan also destroyed much of the Grenada frog's natural habitat in 2004. Berg hopes that by creating a breeding program for these frogs in captivity, he can ensure their survival – and perhaps that of other endangered frogs.



## pac man frog

The Zoo's Chacoan horned frog that arrived last Jan. 24 as a froglet has an appetite the size of an elephant. Well, not quite, but these frogs eat almost anything they find: small rodents, birds, fish, insects and even other frogs. Found in the wild in the Chacoan region of western Paraguay, southeastern Bolivia and northwestern Argentina, these frogs also are known as "Pac-Man frogs" because their heads resemble a voracious, wide-mouthed character from an old arcade game called Pac-Man. The frog also has horn-like protuberances above its eyes and bumpy skin. Now nearly mature, the Zoo's Chacoan frog is about 3 inches in diameter.

\*Johnston's frog, Chacoan horned frog, Surinam toad, tiger salamander, dwarf sirens, yellow-banded poison frog, green and black poison frog, dyeing poison frog and the Rio Cauca caecilian.



# for survival

By Julia Kolker, Perel Skier and Loni Luna



## in disguise

The Surinam toad may fool you at first. It looks a bit like a flat rock. Dwelling along the bottom of South American streams, it hardly stirs. Instead, the Surinam waits for its prey to float nearby. Concentrated nerve endings in the toad's fingertips make it adept at distinguishing food from drifting foliage. Its fingers brush something soft and fleshy and the Surinam reaches out to shove the food in its mouth. One zookeeper describes the toad's reproduction as "a little alien-like." The toads mate in water. As the female releases eggs, the male fertilizes them and embeds them in her back through a series of loops. Babies develop within their mother's back and emerge from her skin as full-blown Surinam toads (albeit only the size of a thumbnail). The Surinam toad is not endangered.

For froggy activities, go to our Web site, [www.zoosociety.org/funstuff](http://www.zoosociety.org/funstuff).



## don't eat me!

Poison dart frogs are as dangerous as they sound. They get their name from the tribes of their Central and South American habitat, who would rub arrowheads and darts across the frogs' skin to make tips toxic. Since their poison is only a byproduct of their diet in the wild (mainly ants), the Zoo's frogs are not actually poisonous. These tiny (about 1 inch in diameter) amphibians are also remarkable for a variety of bright jewel-toned skins, which warn predators of their deadliness. Shown here is the yellow-banded poison dart frog (also called bumblebee poison dart frog). The other two species at our Zoo are the green and black poison frog and the dyeing poison frog. They are not endangered.

## the invader

The invasive Johnstone's whistling frog is a successful colonizer that poses a threat to other frog species on the Caribbean island of Grenada. When humans accidentally introduce the Johnstone's frog to areas that are not its native habitat, the frog quickly consumes much of the resources other species typically rely on. The Johnstone's frog now populates many Caribbean islands and South and Central America. Hardier than many other types

of frogs, it can supplant native species in habitats that have been damaged by hurricanes or human expansion.



## fungus fear

**Chytrid:** it's an ugly word with an ugly meaning. In 2005, the problem of the deadly fungal infection became big news, even though now researchers think chytrid may have been wiping out amphibians for decades. Scientists suspect that chytrid developed naturally in Africa, and was spread through the frog pet trade, frogs shipped for medical research and bullfrog farming, and infected water. The fungus causes frogs to suffocate by thickening their skin, which they use to breathe. There's no cure for chytrid in the wild. "You can treat frogs if caught in time, but if you release them into an environment filled with fungus, they die," says Craig Berg, the Zoo's expert on reptiles and amphibians. In 2006, Berg traveled to the El Valle Amphibian Conservation Center (EVACC) in Panama to help save the Panamanian golden

frog (see our October 2006 *Alive* story, at [www.zoosociety.org/membership](http://www.zoosociety.org/membership), and select "publication archive/back issues of *Alive* magazine"). Today, EVACC acts as a "safe house" for dozens of frog species (including the nearly extinct golden frog), which may never leave quarantine. A less-virulent form of chytrid surfaced in the United States; Berg worries that it may have made its way to Wisconsin. Although frog populations vary from year to year, "it seems as if the number of frogs in the state is down," he says. Breeding frogs in captivity – and giving people a heads up about these vital creatures – may be frogs' best shot at survival (see the Grenada frog story *Making History* at left for more on frog breeding at the Zoo).



Panamanian golden frog

# Belize: Taking on Conservation

A few years ago, naturalist Mario Teul was exploring a cave deep in a tropical forest in Belize. Turning a corner, he was startled to spot two huge Morelet's crocodiles lying side by side. They were 8 to 10 feet long and could easily attack a human. Teul and his group were only five feet away. They remained still and cautiously observed these predatory – and endangered – reptiles, then quietly backed away. The crocodiles often face a different fate. “They’re hunted for their skin,” Teul explains. “People are trigger-happy. Every time they see something interesting, they shoot it.”



Lisa Smith photo



Lisa Smith photo



Lisa Smith photo



Richard Brodzeller photo

Clockwise from top left:  
Reynold Cal, David Tzul,  
Mario Teul, Stevan Reneau

Protecting crocodiles – and hundreds of other animals from rare birds to sleek jaguars – is just part of Teul's job on a 6,009-acre nature preserve in the Central American country of Belize. Called Runaway Creek Nature Preserve,\* the land was purchased by Milwaukee's Foundation for Wildlife Conservation, Inc. (FWC), in 1998. Many of the preserve's animals and plants – including crocodiles, which breed in wetlands and wet caves – face extinction throughout Central America. The non-profit Zoological Society of Milwaukee (ZSM) and its partner, the FWC, have long worked to conserve wildlife in this country. Belize still has large tracts of undeveloped land where conservation efforts can make a difference.

That's where Teul comes in. He's one of four Belizean conservationists employed by the FWC. The Zoological Society and FWC have trained and helped to fund salaries for Teul, Reynold Cal, David Tzul, and Stevan Reneau. They do everything from banding birds to guiding researchers on the preserve. They can easily point to some of the

\* On Belize maps, it is called Runaway Creek Nature Reserve.

The spot-breasted wren resides in Belize.



Lisa Smith photo

Wisconsin birds that winter in Belize: catbirds, ruby-throated hummingbirds and black-and-white warblers.

In fact, the Zoological Society training they have received over the years and their enthusiasm for the work have increased their status in the community. “They have gained so much expertise that they have been asked to train other Belizeans,” says Vicki Piaskowski, who trained them in bird identification and research methods. She is the international coordinator of Birds Without Borders-*Aves Sin Fronteras*® (BWB-ASF). This is an international bird research-conservation-education project jointly run by the ZSM and FWC. “Our Belize staff are recognized as **the** bird experts in Belize.”



Morelet's crocodile

Now these staff members have taken over management of both the BWB-ASF project in Belize (which studies resident birds and birds that migrate north) and of Runaway Creek Nature Preserve. Reynold Cal is manager of the preserve. Mario Teul is Belize coordinator of BWB-ASF. David Tzul and Steven Reneau guide researchers and tour groups through the preserve.

“For conservation to work, you have to get involved with the local people,” says Dr. Gil Boese, who created the BWB-ASF project. As ZSM president emeritus and a founder of the FWC, he has led conservation efforts in Belize since the 1980s. One of his goals with BWB-ASF was to train Belizeans to be conservation leaders. “In the long run, you want to see the new leadership come from within the country,” he says. The ZSM and FWC have provided jobs, training and schooling for more than 22 Belizeans working on Runaway Creek and with BWB-ASF. Some have gone on to graduate school and many have continued working in conservation.

One of the big successes is Omar Antonio Figueroa. “Omar was our national coordinator for the Belize BWB-ASF for six years,” says Dr. Boese. “He had great organization skills, and he developed into a very intuitive scientist. He believed that wild areas should be protected.” With encouragement from Dr. Boese, Figueroa, who earned a Fulbright scholarship, went to graduate school at the University of Florida at Gainesville. His master's thesis was



Lisa Smith photo

on the rare jabiru stork (he helped study two nests discovered on Runaway Creek Nature Preserve). Now he is working on his Ph.D. from the University of Florida, studying jaguars and pumas on the preserve (see accompanying story).

Protecting Runaway Creek Nature Preserve from poachers is another key job of its staff – and that can be a difficult task in this underdeveloped country. Poachers hunt animals such as white-tailed deer and collared

Lisa Smith photo

peccaries for food. Others come in and steal trees for lumber. Farmers who live nearby kill the preserve's jaguars that raid their livestock. (In 2004, the Belize Zoo launched the Problem Jaguar Rehabilitation Project, which takes in and trains problem cats and then sends them to North American zoos, including the Milwaukee County Zoo. The ZSM and FWC help to fund that project.) The staff can drive only three or four miles into the preserve before roads end and they have to hike. Their vehicle often needs repair, says Teul. “We cannot prevent all the illegal activities from occurring, but for the most part, we have been able to manage the land.”

Income-generating projects that help the nearby community could reduce illegal activity, says Dr. Boese. In one project, the staff has culled some mahogany trees, and the wood is used by Belizean craftspeople to make high-quality camp chairs. For several years Dr. Boese has worked with international conservationists, ecotourism businesses and Belize staff to train bird guides;



Nick Stephens photo



Lisa Smith photo

Spider monkeys, turtles and birds such as the keel-billed toucan (above) live on Runaway Creek Nature Preserve.

develop educational programs for North American and Belizean university students; arrange orchid-viewing tours led by the Belize Botanical Gardens and archaeological tours of the preserve's caves, home to ancient Maya cave paintings and pottery. He has encouraged several researchers to study on the preserve, including the University of Calgary, which is conducting a five-year study of spider monkeys.

Educating children is key to helping this country save its rich wildlife and the environment, says Dr. Boese. Part of the BWB-ASF project included ZSM and Belize Zoo educators working together to conduct programs for Belize schoolchildren. He also mentions Dr. Colin Young, a Belizean whom Dr. Boese first met when Young was age 9 and giving tours of a howler monkey reserve. Today, Dr. Young is coordinator of the ecology and environmental science programs at Galen University in Belize, and a frequent visitor to Runaway Creek. Success stories such as Young's and Figueroa's spell the conservation future for Belize. As he turns management of Runaway Creek Nature Preserve over to the Belizean staff, Dr. Boese says, "The preserve will be in good hands."

-By Julia Kolker

# Realm of the

It's not easy to get to this limestone cave, but the jaguars find it. They probably don't even notice the red jaguar painting on the wall. Nor would they care that it may date back more than 1,000 years – one of the oldest Maya cave paintings in Central America. In fact, this is the only cave painting of an



BWB-ASF staff photo

Jaguar photographed in cave by a heat-sensitive camera

animal discovered so far in Belize, and its cave is one of only nine in Mesoamerica with Maya paintings. If it weren't for organizations from Milwaukee, no one might have known about it.

It is so appropriate that the painting is of a jaguar. The Foundation for Wildlife Conservation, Inc. (FWC), and its partner, the Zoological Society of Milwaukee (ZSM), have been working to save the endangered jaguar in Belize for years. Now the attention generated by this jaguar painting may help the actual big cats by providing another reason to save big-cat habitat. The cave painting is on a Belize wildlife preserve owned by the FWC. The 6,009-acre sanctuary is called Runaway Creek Nature Preserve.\*

For years the sanctuary's staff have seen evidence of jaguars in the limestone caves and elsewhere on the land. Now a former staff member, Omar Antonio Figueroa, is conducting a study of jaguars on the preserve and adjoining properties as part of his Ph.D. project. With help from the staff, he's tracking the number of jaguars, their movements, their prey and how they coexist with another big cat found on the preserve, the puma.

Reynold Cal, manager of the preserve, is one of Figueroa's research assistants, helping him capture, immobilize, attach radio collars, photograph jaguars and pumas, and monitor their movement patterns through the collars. Since the study began last January, they have photographed seven different

\*On Belize maps, this is listed as Runaway Creek Nature Reserve.

# Jaguar

jaguars in a relatively compact area and radio-collared three jaguars as well as three pumas.

The immediate goal is to find out what big cats need to survive and how much land is needed. Researchers already know that big cats roam great distances and need lots of room. According to Dr. Gil Boese, president of the FWC, the larger goal is to create a corridor of wildlife preserves through Belize for big cats. Such a corridor also would protect other endangered or rare wildlife, including butterflies, birds, tapirs, and monkeys.

It's the jaguar, however, that captures people's imaginations. That was so even in ancient times. The jaguar "is a symbol of Maya royalty," notes Dr. Jaime Awe, director of Belize's Institute of Archaeology. Awe, who is an expert on Belizean caves, has studied the jaguar painting and written about that painting and other "glyphs," or pictographs, in what he has labeled Painted Cave at Runaway Creek. In a presentation called "Entering the Jaguar's Realm," Awe says the painting is a rare find. Adds Dr. Boese, who's a zoologist, "These cave paintings indicate a royal Maya ceremony from 100 to 900 A.D. The jaguar was a symbol of strength, and caves were a gateway to the underworld."

While the jaguar glyph was discovered in 2005, more Maya red paintings were found in another cave on the preserve in spring 2008. Dr. Boese would like Canada's University of Calgary, where Awe lectures, to set up a Ph.D. program in cave studies on Runaway Creek Nature Preserve.

Meanwhile, Figueroa, who has a master of science degree in wildlife ecology and conservation from the University of Florida at Gainesville, hopes to complete his big-cat study by August 2009. He will use the results to help in jaguar conservation. Says Dr.Boese of Omar Figueroa, "I think he is going to be one of the leaders of conservation in Belize." The jaguars certainly will benefit.

-By Paula Brookmire



BWB-ASF staff and Dr. Gil Boese (second from right) show the size of the jaguar cave drawing (above) on the wall behind them.



BWB-ASF staff photo

In this 1999 photo, Omar Figueroa was doing research for the BWB-ASF project in Belize.



BWB-ASF staff photo

In this 2008 photo, Omar Figueroa (left) and Reynold Cal attach a radio collar to an anesthetized puma on Runaway Creek Nature Preserve in Belize.



A jaguar at the Milwaukee County Zoo

Richard Brodzeller photo



## Humboldt Penguin Chick

Hatched: March 19, 2008

Taylor Family Foundation Humboldt Penguin Exhibit

If you visited the Zoo's Humboldt penguins last spring, you may have noted a penguin chick sporting a Mohawk-like hairdo. The bold little bird is Mariano, one of two Humboldt chicks hatched earlier this year (the other, a female, was hatched to Jack and Eva in May). Humboldt penguins are endangered birds found along the coasts of Chile and Peru. Chicks reach adult size in just a few months, an adaptation that makes it harder for predators to spot them. But it takes more than a year for chicks to go from gray down to juvenile feathers to adult feathers. Chicks help things along by plucking out most of their soft, downy baby feathers. Mariano couldn't reach the strip of feathers on his head, which resulted in his rockin' style. The Mohawk was gone by June, but Mariano still sports a youngster's white eye patches (adults have black patches) and a soft, gray stripe on his chin (adults have white stripes). Compare the chick and adult in the photo, where Mariano rests in front with an adult behind him. During the two to three months it takes for a chick to grow a coat of waterproof feathers, it can drown if it falls in the water. So zookeepers typically do not put a chick into the pool area until it has these juvenile feathers. "Once the chick is in the water, Mom and Dad walk along the edge and call the chick to where it's shallow so it can practice climbing out," says main Humboldt keeper Carol Kagy, area supervisor of the Herb & Nada Mahler Family Aviary. "It's really neat to watch." You can spot Mariano's parents, Anke and Houdini, by their matching light gray wing-bands, hers on the left flipper, his on the right. Penguins that are paired sport the same color wing-band. Mariano wears a light-blue band on his right flipper. The penguin family will be out splashing all winter.



## Greater Kudu

Born: February 11, 2008

African Waterhole Exhibit

Tamu, the Milwaukee County Zoo's new greater kudu, has a reputation as a daddy's girl. "Tamu and her dad, Chandler, seem to have quite an affectionate bond, more than usual among hoofstock fathers," says Dawn Wicker, area supervisor of Winter Quarters, the indoor Zoo area where many warm-weather animals live in winter. "They spend a lot of time nuzzling each other." Tamu's lovable nature reflects her name, the Swahili word for "sweet." In their native central and southern Africa, greater kudus are more famous for their impressive physical features rather than for cuddly personalities. One of the larger grassland antelopes, greater kudus are impressively fast and graceful. Their narrow bodies and long legs make them excellent runners and jumpers. In the wild, these animals can clear 8-foot-high hurdles! Adult males sport long, spiraling horns for fighting with fellow kudus when competing for mates. Greater kudus can be very hard to spot in their woodland habitats thanks to the stripe-like marks on their bodies. These work as camouflage amid trees to protect them from predators such as hyenas, lions and even humans, who hunt this declining species. Another kudu defense tactic is standing very still when alarmed. At the Zoo, the kudu family rarely stands around: Tamu, Chandler and Mom Megan romp with the waterbucks in the African Waterhole Exhibit (also home to zebras and marabou storks). In late fall they go off exhibit to Winter Quarters.



## Impala

**Born: June 10, 2008**  
**Holz Family Impala Country**

The Milwaukee County Zoo has added another spice to its rack with the birth of Curry, an impala. All the Zoo's female impalas have been named after a cooking seasoning! Curry's two half-sisters are Cilantro and Nutmeg. Mom is Saffron; her half-sister is Cinnamon. You could say that they make for a spicy mix for Dad Lloyd to handle. Zookeeper John Durrell says Curry is living up to his feisty name, adding that he stood on his own and began nursing right after birth. "He's a good, strong boy, very hardy." By October, Curry should have knobby stumps of horns poking from his head. Called an "edge species," impalas are medium-sized antelope native to the African plains between heavy forest and wild grasslands. They are extremely versatile and can change what they eat depending upon season and availability. So they can browse herbs and vegetable shoots when the grass is dry and thus survive in harsh lands where few other grazing animals venture. You may find that hard to believe when you see these slight, graceful creatures frolicking in their yard. Yet their elegant build is an advantage. When a predator attacks, a herd of impalas can jump up to 10 feet in all directions at once to confuse it. Add a little zest to your day: Check out Curry in the Holz Family Impala Country. But visit soon. Impalas go off exhibit into warm quarters for the winter.



## Baird's Tapir

**Born: May 2, 2008**  
**South American Exhibit**

What looks like a watermelon and shares a name with the Maya god of rain? It's Chac, the Milwaukee County Zoo's new baby Baird's tapir. Like all Baird's tapirs, Chac was born with a reddish coat that has squiggly white stripes and spots reminiscent of a watermelon. This camouflage makes it easier for tapir moms to hide their offspring in their native Mexico, Central America and western regions of Colombia and Ecuador. In the Central American country of Belize, where they are the national animal, they're nicknamed "mountain cow." Yet these endangered animals are actually related to horses and rhinos.

Tapirs – short, stubby mammals – are famous for their long "snout" (also called the proboscis). Baird's tapirs live in habitats ranging from marshes to mountain cloud forests, and graze on the low-growing shrubs and vegetation near the water. Chac, the smallest of the Zoo's three tapirs, started getting an adult coat when he was 4 months old. In October, he'll look like a smaller version of parents Eve and Harley. The fourth offspring born to this pair at our Zoo, Chac was named after a Maya god of rain and fertility, who was sometimes depicted with a tapir's head. Divine patronage or not, Chac still gets nosed around plenty by his mom in the yard, since mother tapirs keep a close eye on their babies. She doesn't have to worry: Chac "had an amazing ability to follow his mother from the time he was born," says zookeeper Bob Collazo. View this adorable, round-bellied rain god on warm days in the fall, before he goes off exhibit for the winter.



# Mahal Holiday Ornament

Mahal, the Milwaukee County Zoo's young orangutan, loves to swing around his exhibit. Decorate your tree this holiday season with a swingin' orangutan ornament. At only \$14,\* this is the perfect gift for the ornament collector.

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Mahal the orangutan

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\*The \$14 cost for the Mahal ornament includes postage, mailing materials and 5.6% WI sales tax. Proceeds help the Zoological Society support the Zoo's animals.