

# Alive

A monarch butterfly with orange and black wings is perched on a cluster of small purple flowers. The background is a soft, out-of-focus green.

## Inside

- Butterflies Star This Summer
- Theater at the Zoo
- Bonobos Get an Outdoor Exhibit
- Gardens for a Rainy Day



*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.*

**2010-2011 BOARD OF DIRECTORS**

**Directors**

Thom Brown  
 Paul Cadorin  
 Michael G. Carter  
 Dr. Robert Davis  
 Dave Eager  
 Michael M. Grebe, Jr.  
 Karen Hung  
 Katherine Hust  
 Michael T. Jones  
 Karen Peck Katz  
 Maria Gonzalez Knavel  
 Joe Kresl  
 Caroline Krider  
 James Kuehn  
 Thomas (T.J.) Marini  
 Allen Martin  
 Quinn Martin  
 Jack McKeithan

Jay McKenna  
 Kat Morrow  
 Jill Grootemat Pelisek  
 Gina Alberts Peter  
 Joan Prince, Ph.D.  
 Scott Redlinger  
 James C. Rowe  
 Barry Sattell  
 Kim Schaffer  
 Rick Schmidt  
 Billie Jean Smith  
 Judy Holz Stathas  
 David Strelitz  
 Rich Tennesen\*  
 Brookellen Teuber\*\*  
 Gregory Wesley  
 Jane Wierzba  
 Ray Wilson  
 Anne Zizzo

**Honorary Directors**

William J. Abraham, Jr.  
 John B. Burns  
 William M. Chester, Jr.  
 Stephen M. Dearholt  
 Richard A. Gallun  
 Edward A. Grede  
 John A. Hazelwood  
 Robert A. Kahlor  
 Ann McNeer  
 Sandi Moomey  
 William G. Moomey  
 Jeff Neuenschwander  
 Bernard J. Peck  
 Kurt W. Remus, Jr.  
 Jay Robertson  
 John W. Taylor  
 Allen W. Williams, Jr.  
 Paul Wong  
 Bernard C. Ziegler III

\* Chair of the Board

\*\* Associate Board President

**2010-2011 ASSOCIATE BOARD**

**Directors**

Anthony Baish  
 Deb Blommer  
 Bill Bussler  
 Matthew D'Attilio  
 Cherie Eckmann  
 Mary Ellen Enea  
 Jennifer Fahey  
 Darryll Fortune  
 Joseph Frohna  
 Gigi Gamboa  
 Tami Scully Garrison  
 George Justice  
 Karen Loth  
 Maureen Mack  
 Pat McQuillan  
 Kristin Occhetti  
 Jim Olson  
 Kent Oren  
 Margie Paur

Meghan Shannon  
 Michael Sheppard  
 Tricia Shinnars  
 Brookellen Teuber\*  
 Peter Underwood  
 Laura Vogt  
 Eido Walny  
 Jennifer Fahey  
 Mark Zimmerman

**Honorary Directors**

Bob Anger  
 David Batten  
 Lori Bechthold  
 Nora Dreske  
 John Fleckenstein  
 Mike Fox  
 Linda Grunau  
 Eli Guzniczak  
 Lee Walther Kordus

Peter Kordus  
 Joe Kresl  
 Quinn Martin  
 Kat Morrow  
 Katie Pionkoski  
 Richard J. Podell  
 Bunny Raasch-Hooten  
 Arlene Remsik  
 Barry Sattell  
 Dan Schwabe  
 Randy Scoville  
 Judy Holz Stathas  
 Jeff Steren  
 David Strelitz  
 Jim Szymanski  
 Kathleen Toohey  
 Jane Wierzba  
 Ray Wilson

\* Associate Board President

**ZOOLOGICAL SOCIETY MANAGEMENT STAFF**

**President/CEO**

Dr. Robert M. Davis

**Finance/Administration**

John Heindel,  
 Vice President

**Education**

James Mills,  
 Director

**Communications, Marketing & Membership**

Robin Higgins,  
 Vice President

**Creative**

Marcia T. Sinner,  
 Director

**Technology/Membership Services**

Dominic Schanen,  
 Director

**Development**

Karen Von Rueden,  
 Vice President

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

**Editor**

Paula Brookmire

**Printer**

NML Graphics

**Alive Writers**

Julia Kolker  
 Erica Breunlin

**Graphic Designer**

Roberta Weldon

**Alive Contributor**

Chuck Wikenhauser

**Photographer**

Richard Brodzeller  
 (unless otherwise noted)



A zoo is a wonderful place to “grow” and develop new scientists. You can observe animal behavior first-hand. You can view animals from around the world that you might never get a chance to see otherwise. You can study rare and endangered animals that are disappearing in the wild. And you can collaborate with other people who are fascinated by animals.

At the Milwaukee County Zoo this summer you'll have some additional exhibits to pique your curiosity and hone your observation skills. One of

the most exciting is the new outdoor bonobo exhibit (see page 8), thanks to a generous gift from an anonymous donor to the Zoological Society of Milwaukee. A connection of mesh chutes, towers and playrooms will allow zoogoers to see and hear these rare, endangered great apes up near treetop level, where they are most often found in the wild. You can stand on our outdoor gorilla deck and look up at the bonobos, and they'll probably be just as curious about you. Whether you're a student or a retiree, we encourage you to take notes on the various ways bonobos behave and communicate. And when there's a Zoo Pride Primate Committee volunteer nearby, you can go to an expert with some of your questions. To learn what professional bonobo scientists do, an extensive Zoological Society graphics display, diorama and video kiosk near the indoor bonobo exhibit will provide you vivid details and interactive opportunities.

If your scientific curiosity turns more toward the mysteries of the colorful, you'll want to bring your camera to our special summer exhibit, *Butterflies! In Living Color*, sponsored by Sendik's Food Markets. This indoor exhibit (page 11) will feature North American butterflies that fly as far south as Mexico. We'll have a butterfly-identification chart and a display of live butterflies emerging from pupae. For children, our Kids Alive section in this issue (page 12) features butterfly activities. And the Zoo has four outdoor butterfly gardens where you can learn about the plants butterflies prefer and take some more fabulous photos. The gardens are models for what you might do at home.

Another model for a home project: rain gardens. The Zoo has put in four of these to help conserve water and reduce storm-water damage (page 6). If you're thinking of creating one at home or for your business, study the ones at the Zoo. The Zoological Society has provided signs explaining what a rain garden is and how attractive it can be.

Speaking of researchers, the Zoo's own Robert Collazo can tell you how important collecting data can be to zookeepers (page 10). He volunteers much of his own time to record vital statistics for Zoo animals ranging from tapirs to moose, often so keepers will know what a normal growth rate is. So get out your notebooks, iPads, cameras and binoculars, and delve into the secrets of wildlife here at the Zoo.

Dr. Robert (Bert) Davis  
 Chief Executive Officer

# Alive

## 4 *Education: Summer Days, Zoo Plays*

Sit back, relax and enjoy the show! The Zoological Society introduces Kohl's Wild Theater, in partnership with Kohl's Department Stores through Kohl's Cares. Meet passionate theater coordinator, Dave McLellan. **WEB:** For a list of show times and other information: [wildtheater.org](http://wildtheater.org)

## 6 *Setting a 'Green' Example*

Learn how the Milwaukee County Zoo's new rain gardens are making a big eco-friendly difference. **WEB:** For more details on rain gardens and other Zoo "green" efforts: [zoosociety.org/greeningthetoo](http://zoosociety.org/greeningthetoo)

## 7 *Farmyard Fantasy*

Toddlers can play in their own tiny Munchkin Dairy Farm at the Zoo thanks to Northwestern Mutual Foundation. You'll find the dairy in the Northwestern Mutual Family Farm.

## 8 *Bonobos Head Outdoors*

See the Zoo's bonobos in a new outdoor exhibit. Marvel at the new indoor graphics about bonobo research in the wild and ape care at the Zoo.



Dave McLellan



Outdoor bonobo exhibit

## 10 *Conservation Chronicles: Going Beyond the Job*

What does a grizzly cub weigh at birth? How long are moose antlers? A zookeeper records detailed animal statistics on his own time. **WEB:** More photos and animal details from zookeeper Bob Collazo: [zoosociety.org/collazo](http://zoosociety.org/collazo)

## 11 *A Flutter of Color*

It's a riot of color at the Zoo's special summer exhibit, Butterflies! In Living Color, sponsored by Sendik's Food Markets. Discover why butterflies are so colorful.

## 12 *Kids Alive*

Try a butterfly-inspired craft, puzzle and sandwich! **WEB:** More butterfly activities: [zoosociety.org/funstuff](http://zoosociety.org/funstuff)

## 14 *What's Gnu*

A new baby bonobo, baby cotton-top tamarin and female elk. **WEB:** More new animals: [zoosociety.org/gnu](http://zoosociety.org/gnu)



Queen butterfly (Photo by Jan Meerman)

## *Contributors*

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

## ANNUAL REPORT

Our annual report will be available online in May at [zoosociety.org/annualreport2009-2010](http://zoosociety.org/annualreport2009-2010).

**ON THE COVER:** The monarch butterfly

# SUMMER Days, ZOO PLAYS

A young explorer travels to the future to learn about orangutans in the wild – or so he thinks. Upon arrival in the future, the explorer learns he has been tricked by a fellow traveler. Will the young explorer catch on to his companion's nefarious plot, make it back to the time machine, and find a way to save orangutans? The story may sound like an adventure movie, but it's actually a play you can see this summer at Kohl's Wild Theater in the Milwaukee County Zoo. Kohl's Wild Theater is made possible by a partnership with Kohl's Department Stores through Kohl's Cares.

From May 28 through Sept. 5, you can catch live, 15-minute professional plays five times a day in the Zoo's Northwestern Mutual Family Farm\* – all free with regular Zoo admission. Created specifically for Kohl's Wild Theater by professional playwrights, these conservation-themed performances use drama, songs, games and puppetry to inspire kids and adults to care more about the natural world.

In "The Mysterious Case of the Disappearing Bees," a detective tries to solve the mystery of disappearing bees in Wisconsin – and learns why these creatures are so valuable to the ecosystem. And in "Lights, Camera, Arctic!" a filmmaker's attempt to make a documentary about polar bears goes awry because he unwittingly wastes energy.

These three kid-friendly plays will rotate each day this summer, says Dave McLellan, coordinator of the Zoological Society's Kohl's Wild Theater programs. The plays call for audience participation; so each performance will be a very different experience.

Each play encourages the audience to help animals and our planet by doing simple things at home, explains McLellan, who is part of the Zoological Society's Conservation Education Department. For example, the play about bees asks kids to plant flowers and encourages parents to avoid using pesticides. The orangutan-conservation storyline is all about finding alternatives to foods and products made with palm oil. Plus, performers will ask kids to actively participate in the plays by singing along or dancing, for example.

Some plays will even feature 2-foot-tall animal puppets made for the Zoo by puppet designer Brandon Kirkham, who works at First Stage Children's Theater in Milwaukee. And some will be set to music by Milwaukee-area composer John Tanner. In fact, a team of Milwaukee-based designers – including costume designer Andrea Bouck, set designer Steve Barnes, and sound-technology expert Chris Guse – is working to create theatrical magic.

The acting and antics won't be confined to the stage, however. Starting Memorial Day Weekend, you could come upon impromptu

skits or short performances in locations throughout the Zoo every day. Kids can chat with performers, ask questions and play animal-themed games.

Once the summer season of plays is over at the Zoo, the Zoological Society will bring plays to schools, libraries, special events and festivals. Those 45-minute performances start in October, but they can be booked now at [wildtheater.org](http://wildtheater.org). Like plays at the Zoo, these programs feature conservation messages and focus



Zoological Society educators Kristin Ziarnik and Heather Thomack dressed in costumes last year for the initial planning of theater shows.



## KOHL'S WILD THEATER AT THE ZOO

May 28 through Sept. 5, daily, in the theater at Northwestern Mutual Family Farm. All shows are free. Please see schedule at the theater for show times starting in May or go to [wildtheater.org](http://wildtheater.org).

Theater coordinator Dave McLellan  
Photo provided by Dave McLellan



on issues facing animals such as jaguars, penguins and native Wisconsin wildlife. And, like all Zoo programs, the shows are interactive and appropriate for elementary-school-age children. As the theater presentations expand, outreach programs will continue year-round, and summer shows at the Zoo will kick off again in May 2012.

## ACTING & TEACHING

Like many young actors, Dave McLellan moved to New York City to catch his big break. When he was hired as an actor by the Wildlife Conservation Society – which runs theater programs in the city's Bronx and Central Park zoos – he found more than a job. It was the start of a passion for animals and conservation. Today, McLellan is coordinator of the Zoological Society of Milwaukee's (ZSM's) Kohl's Wild Theater, based in the ZSM's Conservation Education Department at the Milwaukee County Zoo. His job includes commissioning plays, managing performers and the back-stage team,

directing plays, and finding methods to present conservation messages in fun and engaging ways.

"In New York, I learned that acting wasn't just for entertainment, but that you could do theater for social and community reasons," says McLellan. "Theater can make a difference in people's lives and help them grow." He mentioned a zoo show in New York City about birds. "The main characters were two migratory birds flying. They knew that to survive they had to find green places below to rest. They got the audience to help by singing about green places. The chorus was simple: Green, green, green, green. But it was a catchy tune. We would reach 100 people at a time with each performance. As I saw people leave singing the song, I could see they were walking out of the zoo with a message. They could go home and create a green area for birds to land. They maybe didn't even realize that they were being educated. And we found that families would repeatedly come back to the zoo just to see the shows."

McLellan, who previously worked as a conservation educator at the Walt Disney World Resort in Florida, has degrees in musical theater and psychology from American University in Washington, D.C. With more than 10 years of professional theater experience and four years of working with zoos, he is thrilled to start this new initiative in Milwaukee, McLellan says. He hopes that everyone's trip to the Zoo will be "filled with adventure, fun, and inspiration to help preserve animals and their natural habitats." Enjoy the show!

*Stories by Julia Kolker*



Puppet designer Brandon Kirkham shows animal puppets he has made for other theater companies.

Five free shows a day will be performed at Kohl's Wild Theater in the Zoo's farm.

## KOHL'S WILD THEATER OUTREACH

Free outreach programs begin October 2011; book now at [wildtheater.org](http://wildtheater.org).

# Setting a 'Green' Example

What started as a typical rainy summer day at the Milwaukee County Zoo last July quickly turned the Zoo's Zebra Parking Lot into a pond. Visitors and staff alike had to trudge through a half-foot of water to reach their vehicles, some of which were nearly swimming. And they weren't even part of the aquarium exhibit! The Zoo also experienced basement flooding, electrical problems and even a gas line affected by the rain. Water has been just as much of a nuisance at the Zoo as it has been a necessity. Pavement is partially to blame. With the Zoo's huge asphalt parking lots, storm water can build up too fast for storm drains to handle.

Luckily, the Zoo had a plan – a “green” plan. To fight flooding, the Zoo came up with a solution that would not only curb water damage but also conserve water. “If you look at the purposes of zoos, conservation is a very important tenet,” says Zoo Director Chuck Wikenhauser. “We should be setting examples for other organizations and businesses.”

The Zoo's example has two parts. First, it has replaced several asphalt walkways with permeable pavements that look somewhat like a brick road. The pavers act like sponges to absorb surface water from rainstorms, filter it and slowly release it back into the earth. The second step is rain gardens, often located next to permeable pavements. During heavy rainfalls, excess water that gathers under the permeable pavers can drain into a nearby sunken rain garden. There, rainwater nourishes native plants like showy goldenrods and little bluestems. These plants have roots that hold together the sandy soil used in the garden. That prevents erosion.

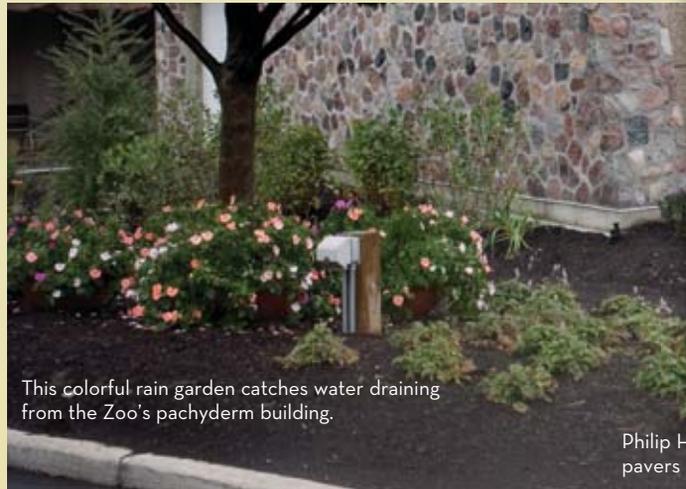
“The sandy soil is called ‘engineered soil,’” says Philip Hung, Milwaukee County's managing architect and principal designer for the project. “It allows water in the basin to settle at the bottom and not form puddles of standing water on the surface. It also acts as a filter to remove pollutants from the collected water.” Adds Wikenhauser: “We're helping to make sure the environment stays clean – or at least cleaner.”

The plants in rain gardens can live without fertilization as bacteria in the soil break down chemicals commonly found in rainwater, such as gasoline-exhaust residue, and create nutrients the plants can absorb. Hung says other benefits of rain gardens include fewer construction requirements than underground storm-pipe systems, a reduced risk of flooding, natural distribution of surface water,

and replenished groundwater. You can find the Zoo's four rain gardens and new permeable pavement areas at:

- The Zoo entrance between the entry gates and the first parking lot;
- Between the Apes of Africa Pavilion and the Herb and Nada Mahler Family Aviary – look for a stretch of bricklike pavers and then a rain garden (decoratively framed by landscape rocks) next to the aviary pond (see photo of Philip Hung with pavers);
- The Dohmen Family Foundation Hippo Home, where rain from the roof drains into a garden (see photo below);
- North of the Australia Building a section of permeable pavers drains into a rock-rimmed rain garden;
- Permeable pavers without rain gardens are found between the Alaskan brown bear exhibit and Australian Outback picnic pavilion and also at the Zoo Terrace.

Signs at both the aviary rain garden and the garden near the Australia Building explain what rain gardens are and their green advantages. Like most Zoo exhibits, the gardens are meant



This colorful rain garden catches water draining from the Zoo's pachyderm building.



Philip Hung shows off permeable pavers that absorb water.



This drawing from Philip Hung shows permeable pavers next to a rain garden.

to educate, says Wikenhauser, so visitors might initiate their own green efforts. You can get more details about water conservation from the Milwaukee Metropolitan Sewerage District, which Wikenhauser says has partially funded many of the Zoo's water-conservation projects.

“Besides being the right thing to do, the rain gardens give us the ability to share these efforts with people in a very easy way,” Wikenhauser says. “We're showing people how effective and easy it can be. It's like we're saying, ‘Wouldn't it be nice if you could do this? See how easy it is?’ We're leading by example.”

By Erica Breunlin

**WEB:** For more information on the Zoo's green efforts, including selling \$45 rain barrels to the public, go to [zoosociety.org/greeningthezoo](http://zoosociety.org/greeningthezoo).



# Farmyard Fantasy

With whimsical shapes, cartoonish designs, and bright splashes of color, the Milwaukee County Zoo's Munchkin Dairy Farm is just as much of a wonderland these days as it is a dairy land. "It's doing a great job of teaching kids about dairy farms," says Marcia Sinner, creative director of the Zoological Society of Milwaukee.

Thanks to a grant from Northwestern Mutual Foundation, the Munchkin Dairy Farm underwent an extensive renovation to refresh its farm-friendly feel. Featuring a new child-size barn, tractor, and truck, and a life-size cow, munchkin land has never been so country-crazed. Sinner collaborated on ideas with Sean Mizer of Studio Works of Milwaukee, and he created the hands-on playground. His farm has exaggerated, inviting structures for children ages 2 to 6 to climb over, under and in between.

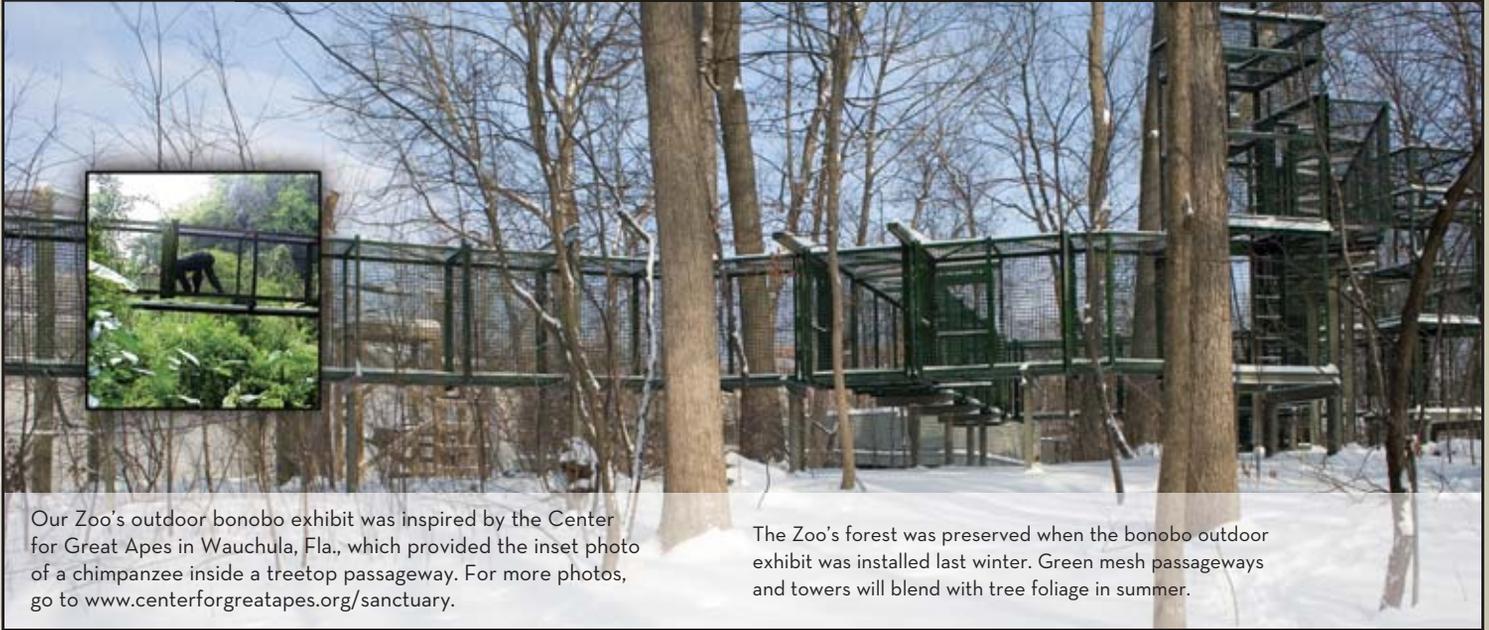
You'll find this new sensation in the octagon Dairy Barn within the Northwestern Mutual Family Farm. Stroll through the bold, red, "balloon-ish" barn into the center of a fantasy farmyard. Here, kids can hop aboard the bed of the child-size green truck, climb onto the driver's seat of the tractor, or pet the cow in its pen. Even the three fence posts shout "dairy." One is shaped like a milk bottle, one like a cheese slice and one like an ice cream cone. "These represent the products of a dairy farm," Sinner says. Kids can make the connection between a cow's milk and the foods they like to eat. Child-friendly signs also will help them learn about farm animals and what a farmer does.

A towering silo – a second entrance to the farm – is stocked with ears of corn that children see as they peer around inside. Constructed to look like fieldstone, the silo teaches visitors why silos are round. If they were rectangular, pockets of air would develop in the corners, causing moisture in the air to rot the corn. The weight of the corn bearing down from the top of the silo further presses out air pockets to keep the corn as fresh as possible. "We would not have year-round dairy production in Wisconsin without silos," Sinner says. "Silos store food for the cows, and if Wisconsin didn't have silos, dairy farms could not function in the winter."

Structures in the old Munchkin Dairy Co-op were made of industrial cardboard that had long since faded in color. The new Munchkin Dairy Farm is made from special foam with a hard coat material to ensure a lasting vibrancy. This tiny dairy is right next to the Zoo's actual dairy, which is the only working dairy farm in the city of Milwaukee. Northwestern Mutual sponsored the remodeling of most of the farm – from gardens to goat yard – in 2005, but the Munchkin Dairy was not part of the project. Now kids can play in a dairy wonderland while live cows are being milked nearby.

*By Erica Breunlin*

# Chutes and



Our Zoo's outdoor bonobo exhibit was inspired by the Center for Great Apes in Wauchula, Fla., which provided the inset photo of a chimpanzee inside a treetop passageway. For more photos, go to [www.centerforgreatapes.org/sanctuary](http://www.centerforgreatapes.org/sanctuary).

The Zoo's forest was preserved when the bonobo outdoor exhibit was installed last winter. Green mesh passageways and towers will blend with tree foliage in summer.

A new sound will burst forth from the Milwaukee County Zoo's 200-year-old forest this spring. You'll hear shrieks and calls as the bonobos explore a new playground – or should we say “tree-house.” For many years it has been a dream to create an outdoor exhibit for these endangered great apes. Soon visitors will look up to see the sometimes loud, always fascinating apes playing near the treetops. The new exhibit will be closer to their natural environment in Africa, where bonobos spend most of their time in trees. Two loops of mesh chutes, towers and “playrooms” have been installed ranging from 4 feet to 26 feet off the ground. When it's warm enough outside (at least 60 degrees), bonobos will be able to exit the Apes of Africa Pavilion and climb to an above-ground passageway that winds through the woods.

“The higher they are, the happier they are,” says bonobo keeper Barbara Bell. They can look down on gorillas in their outdoor yard and on zoogoers watching bonobos from the gorilla deck. Visitors will get a double treat: contrasting the playful bonobos with the more sedate gorillas. “I think the new bonobo exhibit will be very active,” says Bell. “They're loud. They're raucous. They're fun.”

The outdoor exhibit is one of three major upgrades to the Zoo's bonobo area, thanks to a generous gift from an anonymous donor. A second upgrade, made to the indoor exhibit last winter, features more tree trunks and climbing ropes that simulate the vines and trees of their Congo forests. This allows bonobos to use more of the “vertical” space in their exhibit. And the Zoo's two baby bonobos (see page 15) will get more opportunities to learn how to climb, plus jump on new rubber bungee cords. “It should

keep them more active. So they'll be healthier and happier,” says Jan Rafert, the Zoo's curator of primates and small mammals.

The third upgrade, to be completed in late spring, involves dramatic new graphics and interactive displays in the public hallways around the indoor bonobo exhibit. Here you can follow Dr. Gay Reinartz, the Zoological Society's conservation coordinator, through the Democratic Republic of Congo (DRC) as she travels by river in a pirogue (a dugout canoe). You can even have your photo taken inside a wooden pirogue with the Congo landscape in the background. Dr. Reinartz is director of the Zoological Society of Milwaukee's (ZSM's) Bonobo and Congo Biodiversity Initiative. BCBI started with the goal of surveying bonobo populations in Salonga National Park, a World Heritage Site in DRC. The Democratic Republic of Congo is the only place where bonobos exist in the wild. Today BCBI includes a ZSM research station (called Etate) in the Salonga, training for park guards, an agricultural cooperative to help people living outside the park (near Etate) to learn better farming methods, aid to elementary schools in the area, an adult literacy program, and ongoing research on bonobo populations, habitat and food sources.

Some of these programs will come to life for people visiting the bonobo exhibit. A diorama will give you a window into Etate Research Station, complete with a model of a guard who's using a global positioning system to map bonobo distribution. Dr. Reinartz spends nearly six months each year in Congo. At a tree-shaped kiosk near the Zoo's bonobo exhibit, you'll soon be able to view videos she has taken while surveying the forest for bonobos and other wildlife. You'll discover how the Zoological Society is helping Congolese learn to read, write, farm and respect natural resources

# Ladders

Laura, at age 44, is one of the oldest bonobos in Milwaukee's group. She is a grandmother to the youngest (page 15).

and endangered wildlife such as bonobos. There's a dramatic contrast between the advanced technology the ZSM uses, such as solar-powered computers and satellite mapping systems, and its remote research station, which has no electricity or running water and takes three days to reach by pirogue.

The new bonobo-exhibit graphics also will give you insights into great-ape research being



Ropes of fire hose simulate vines in an African forest. Upgrades to the bonobo indoor exhibit offer much more to climb on.

done at the Milwaukee County Zoo. See a video of Emory University (Georgia) researchers describing cognition tests they have given our bonobos, who on some tests are as smart as human children.

Barbara Bell can testify to how smart our bonobos are. Through the amazing training she has spearheaded, the Zoo's bonobos have learned to help with their own health care without being anesthetized. So keepers can give them shots in the arm, do physical exams and even brush their teeth. The bonobos have been conditioned to tolerate and actually enjoy ultrasound scans to chart the progress of pregnancies and potential heart conditions. Curator

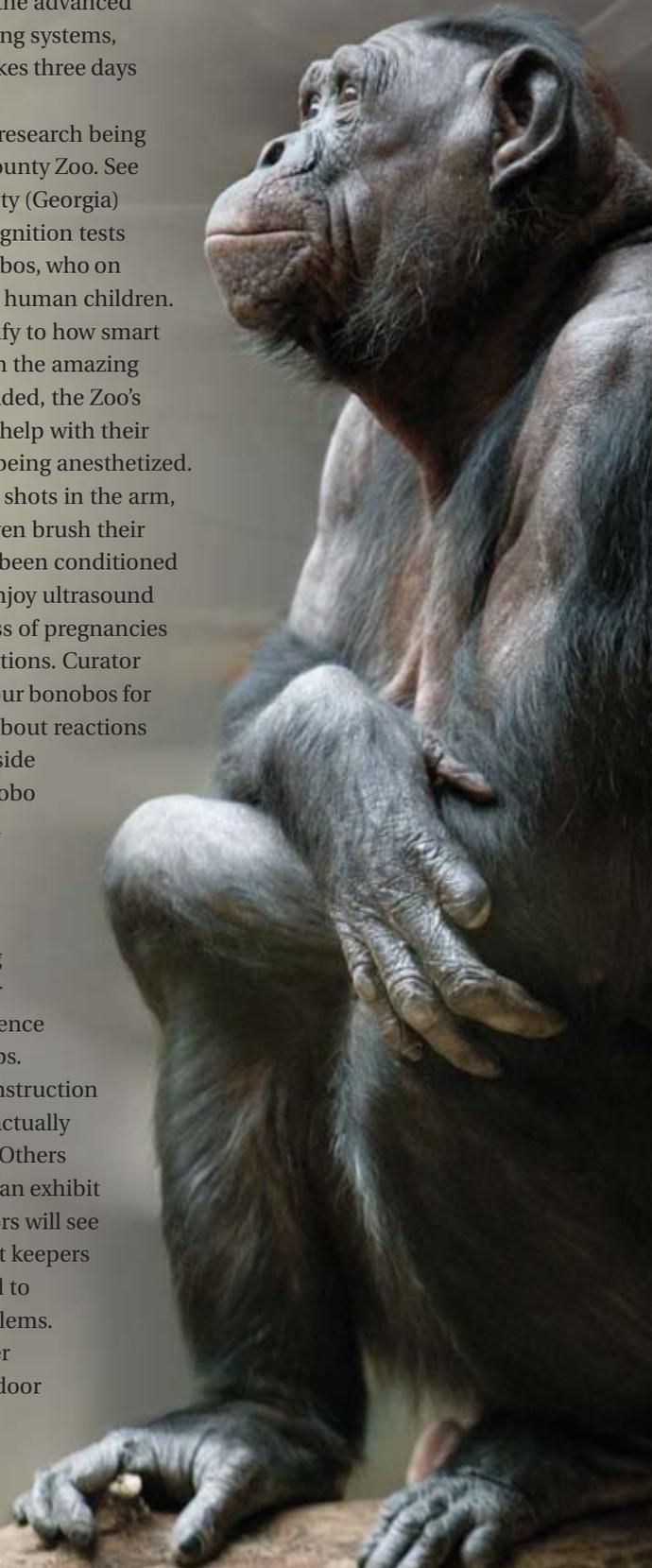
Rafert notes: "All the great apes are prone to heart disease, and we're training all our bonobos for voluntary cardiac ultrasounds so we don't have to anesthetize them and worry about reactions due to the drugs. Keepers have years of training expertise and working with outside consultants and our veterinarians. We have perhaps the largest database of bonobo cardiac and pregnancy ultrasounds in the world." Some of the new graphics will showcase the terrific care and training that our bonobos get at the Zoo.

Adds Rafert: "The donor has given us, the bonobos and the public a really valuable experience. It demonstrates a dedication to the animals. I can't express enough thanks." So plan a trip to the Zoo this summer just to see all the exciting bonobo changes, inside and out. While the bonobos always had a small outdoor yard, it was not on public view. Most of the new exhibit is. So visitors will experience the shrill shrieks and barks of bonobos as they chase each other near the treetops.

"It's going to be a stitch," says Bell. "They've been lined up watching the construction of the outdoor exhibit. They don't understand it's for them, though. When they actually get to explore it, I don't know what to expect. Some of them will just spring out. Others may take months to acclimate." Keepers never put all of the Zoo's 17 bonobos in an exhibit at one time, in any case, Bell adds. There's too much chance for conflict. So visitors will see small groups of animals at a time. And the passageway loops are designed so that keepers can section off some groups of bonobos. This is done for breeding purposes and to protect weaker animals, such as Lody, the group's patriarch, who has heart problems.

One of the fun parts of the new exhibit for the bonobos will be getting closer to the North Shore Bank Safari Train, which they can look down on. In their outdoor yard, the bonobos could hear the train but hardly see it. "Even though it goes by every 15 minutes in summer, they still get excited each time," says Bell. Imagine their excitement when they get to see it.

By Paula Brookmire





Collazo feeds a moose at the Zoo. He can get this close only because this moose was hand-raised. He warns people never to approach or feed moose in the wild.



Bob Collazo trains a Baird's tapir.

# Going Beyond the Job

Some parents record baby's height, weight and important milestones in a diary. Zookeeper Bob Collazo does the same for animals at the Milwaukee County Zoo. Flipping through dozens of notebooks filled with neat, hand-written notes and elaborate drawings, Collazo can tell you everything from Javier the tapir's birth weight to the grizzly bear cubs' size at age 1.

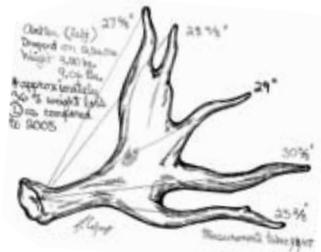
In fact, Collazo has tracked the weight, height, length, growth and pregnancy patterns of animals under his care for years. He fills out journals and organizes notes on his own time, outside his day job as a zookeeper in Winter Quarters (the indoor area where many warm-weather animals spend the winter).

Why does he do this extra work? Little is known about some zoo animals, says Collazo, and keepers can resort to guesses and assumptions. That's a problem if they need to determine what's "normal" or not for a species. For example, it helps to know how much weight an endangered Baird's tapir gains and loses during pregnancy so keepers can adjust her diet. When Eve, one of the Zoo's Baird's tapirs, was pregnant, Collazo weighed and photographed her weekly.

Collazo has a special affinity for animal youngsters. He weighed all the kudu and tapir babies born at the Zoo since 2004-2005. He tracked the weight, length, height and paw size of the Zoo's three grizzly cubs (Brian, Bozeman, Chinook) when they were born here in 2002 to Mom Ronnie. He trained Furlow, a camel born at the Zoo in February 2010, to walk from one enclosure to another and to stand on a scale for regular weigh-ins. The training is done with positive reinforcements such as favorite food items, tender touch and verbal praise. That allows animals to trust the keepers. Even though Collazo in 2007 suffered a broken leg when he was kicked by a camel, he also trusts the animals, knowing that they don't lash out unless they're scared. When Furlow needed to be transferred to another zoo for breeding last November, Furlow's trust allowed Collazo to lead the camel into a horse trailer solely with positive reinforcement, the first time a camel at our Zoo has done that.

Collazo also works with older animals. For years, he and fellow keeper Mike Hoffmann would measure the antlers of the Zoo's

late, great moose, Clifford, who died in 2010. Male moose shed and grow a new set of antlers every year, says Collazo, and he wanted to track how they change over time. The longest set was 26 inches. (See Collazo's drawing of one set of antlers at right.)



Collazo got into research and record-keeping when he began his career in the Zoo's horticulture and grounds department. He noticed that staff would trim plants in animal exhibits and toss the cuttings; so he researched what plants could be given to animals to expand their diets. Thanks to his work – and with approval from Zoo veterinarians – the Zoo added weeping figs, ficus and Indiana clover to the menu. Collazo also helped to expand the Association of Zoo Horticulturalists' list of plants safe for animal consumption.

Today, Collazo juggles a half-dozen projects in addition to his zookeeping duties. He created enrichment activities such as adding new scents to the grizzly exhibit to keep the bears curious and active. He helps Dr. John Scheels, the Zoo's consulting dentist who treats Zoo animals, by assisting during procedures and taping them for the video library in the Zoo's Animal Health Center. And he develops new ways of enhancing animals' lives, such as equine (horse) massage for tapirs and camels. Massage makes them tractable and helps calm them, he says.

Collazo, who worked as a veterinary assistant before coming to the Zoo, grew up watching conservationists Marlin Perkins and Jacques Cousteau on TV. He admired their talent, but learned that "regular people" like him could care for animals if they were trained and devoted. Deputy Zoo Director Bruce Beehler praised Collazo's devotion to animals. "Robert Collazo's dedication to and initiatives in animal enrichment, training and comprehensive record-keeping are great examples of the work being done to enhance the lives of animals at the Zoo."

By Julia Kolker

# A Flutter of Color



The Julia is a brilliant orange gem against green. Photo by Craig Berg



The postman butterfly draws attention with its lipstick-red spots.



The eastern tiger swallowtail has marvelous camouflage.

## Butterflies! In Living Color

Sponsored by Sendik's Food Markets

Special indoor summer exhibit

May 28-Sept. 25

Otto Borchert Family Special Exhibits Building

\$2 per person

Free Days: Zoological Society members get in free to the exhibit on June 7, 8 and 9 from 3 p.m. to 8:30 p.m., with Zoo Pass card and photo I.D.

Avoid: insect repellent; it can kill butterflies.

Web: Butterfly data: [butterfliesandmoths.org](http://butterfliesandmoths.org)

Step into a world of reds, oranges, yellows, greens, blues and purples. At the Milwaukee County Zoo this summer, your eyes can feast on a canvas of colorful butterflies in the special exhibit Butterflies! In Living Color, sponsored by Sendik's Food Markets. As you tour this indoor exhibit, you may wonder: Why so much color?

It turns out that color can be bewitching. Some butterflies use their bright colors to attract mates. Although coloration in most butterfly species is the same in males and females, males of the common blue butterfly species exude an electric blue pigment while the females are varnished in a dull shade of brown. Females seek out the males, lured by their bolder coloration. Anna blue butterflies are very similar. While the top surface of the male's wing features a soft blue hue, the female appears much browner. This follows a trend in blue butterfly species. The males are often more brilliant to draw the attention of females.

Colors also serve as protection. Many butterflies such as the monarch and queen taste foul to predators, and some butterflies are even toxic. So their rich coloration warns predators that they're inedible (see *Kids Alive*, page 12).

While butterfly color is certainly linked to its survival, other factors like habitat influence this insect's ability to succeed in the wild. Butterfly habitats are often threatened, altered or completely destroyed thanks to both people and changing environments. For example, as a caterpillar, the Karner blue butterfly feeds on lupine, a plant primarily found in prairies. As forests have invaded nearby prairies, lupines have died off. "Once prairies disappear, lupines disappear and Karner blue butterflies disappear right along with them," says Craig Berg, the Zoo's aquarium and reptile curator (including insects). As farmers replace butterfly plants with crops and spray them with pesticides, says Berg, "they eliminate butterfly habitat and poison their habitat." When these insects feed on plants polluted by pesticides, they die. The Karner blue is federally listed as endangered, but the species has a stronghold in Wisconsin because the state has done a pretty good job of protecting prairies, says Berg.

The Zoo's special exhibit will feature butterflies of North America. Some may be new to you. "You're going to see a lot of species not found in Wisconsin," Berg notes. "Many of them also can be found in the Caribbean," where Berg and other Zoo staff have been doing research on frogs, snakes and iguanas. Learn about some of that research near the entryway of the butterfly exhibit. Afterward, get in more color as you visit the Zoo's four outdoor butterfly gardens: 1) in front of the Otto Borchert Family Special Exhibits Building, 2) in the Northwestern Mutual Family Farm near the railroad tracks, 3) in the farm near the Bee Exhibit, and 4) next to the Dall sheep exhibit.

By Erica Breunlin



# Kids Alive

## Butterflies: Behind the Beauty

Do you ever wish you had eyes in the back of your head? How about on your arms? Some butterflies like buckeye butterflies have “eyes” or eyespots on their wings. Why? When buckeyes spread their wings, their eyespots look like the eyes of a larger animal. They may scare away predators like birds and lizards\*. Other butterflies, such as monarchs, use bright colors for protection. These insects have special chemicals that taste bad to predators. Predators learn to link the taste of a monarch with its bold orange and black wings and stay away. The viceroy butterfly is a copycat. It uses mimicry to keep safe from predators. With bright orange and black wings, it looks a lot like the monarch. So predators stay away. Why should we care about butterflies? As they flutter from flower to flower, butterflies spread pollen so that more plants can grow. Many of these plants are food crops that feed us. These plants also give us more oxygen to breathe.

Visit the Milwaukee County Zoo’s special exhibit **Butterflies! In Living Color**, sponsored by Sendik’s Food Markets. It’s open **May 28-Sept. 25** (see page 11). Meanwhile, enjoy the butterfly activities on these two pages and at [zoosociety.org/funstuff](http://zoosociety.org/funstuff).

### What’s in a Name?

Butterflies are not just colorful. They often have “colorful” names and fascinating behaviors. For example, did you know that the monarch butterfly was named after a king, King William of England? Or that each type of butterfly has its own way of flying when searching for food or for a mate? Find the following list of names and behaviors in the word search below. Words can go up-down, across, diagonally, and backward

BASKING  
COURTING  
FEEDING  
FLYING  
JULIA  
MONARCH

POSTMAN  
PUDDLING  
RED ADMIRAL  
ROOSTING  
SWALLOWTAIL  
VICEROY

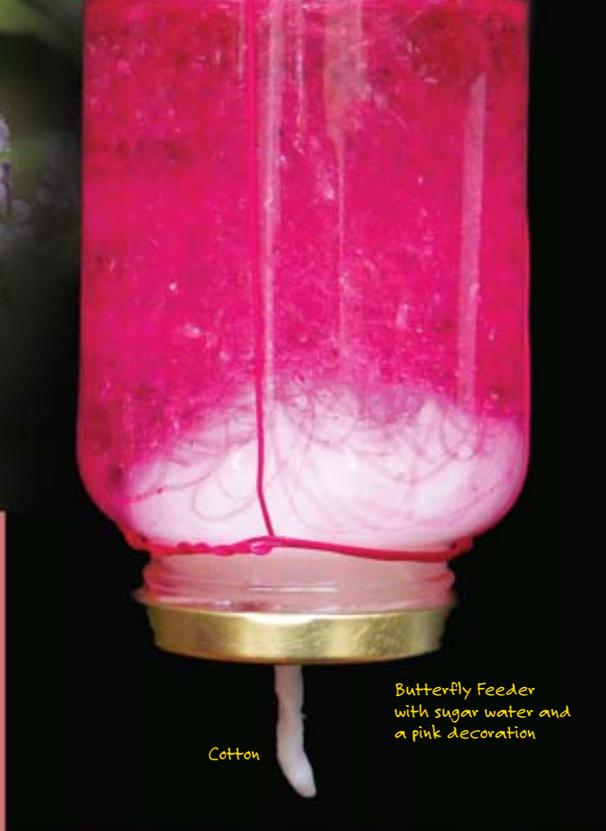
R	D	P	B	V	A	P	G	N	I	Y	L	F	E
X	E	U	E	V	Q	X	N	I	D	M	G	E	D
A	Q	D	B	A	S	K	I	N	G	F	R	E	R
D	Y	D	A	P	O	S	T	M	A	N	O	D	P
R	O	L	D	D	I	I	S	X	Y	N	B	I	A
H	R	I	N	N	M	C	O	U	R	T	I	N	G
O	E	N	C	Z	Q	I	O	P	Z	P	B	G	Y
H	C	G	F	S	H	C	R	A	N	O	M	Q	A
L	I	A	T	W	O	L	L	A	W	S	S	V	E
H	V	C	L	X	E	L	A	I	L	U	J	T	G



# Peanut Butter-fly Snack

(Or Apple Butter-fly Snack)

Here's a snack that's fun to make. It also shows you how buckeye butterflies protect themselves. The round spots are called eyespots. They make the butterfly's wings look like the face of a larger animal. They may scare away animals that want to eat the butterfly.\* Follow the directions to make a fun and tasty butterfly sandwich.

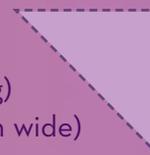
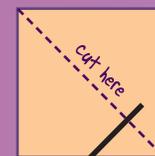


Butterfly Feeder with sugar water and a pink decoration

Cotton

## Ingredients:

- 2 slices wheat bread (each 4 by 5 inches)
- Creamy peanut butter (or apple butter)
- 6 raisins
- 6 light-chocolate Cheerios®
- 2 pretzel stick pieces (each 1½ inches long)
- 1 banana wedge (3½ inches long by ½ inch wide)



## Directions:

1. Peel crust off bread to make a square. Toast bread to a light brown.
2. Spread peanut butter onto 1 slice; put the other slice on top.
3. Cut sandwich diagonally down center so that you have 2 equal triangles. Move triangles so that the center angles touch.
4. With an adult's help, use a butter knife to round off edges of sandwich so they're curved like the buckeye butterfly's wings (see photo above).
5. Cut a wedge out of each "wing" (see photo below).
6. Roll each raisin into a ball and flatten with your finger. Along outside edges of each "wing," spread a ½ inch-wide strip of peanut (or apple) butter. Place flattened raisins onto the peanut butter strip; then press a Cheerio onto each raisin. The dark raisin will look like the pupil of an eyespot.\*
7. For the body, place banana wedge in between the two wings.
8. Carefully poke pretzel stick pieces into one end of banana "body" to look like antennae.

## Feeding Butterflies

Here's an easy butterfly feeder you can make with the help of an adult. The feeder hangs from a tree. Sugar water drips out of a "wick" so mosquitoes cannot breed in the water.

### Materials:

- Glass jar with screw-on lid
- Hammer and nail
- Cotton ball
- Red plastic flower or scrubber for color
- Butterfly nectar  
(10 parts water to 1 part sugar, boiled and cooled)
- String or twine

### Directions:

Remove lid from jar. Have an adult hammer a nail through center of jar lid (this should be done on a work bench). Use a nail or pin to push through about 1 inch of cotton in a strand through the hole, working from inside of lid to outside. Put plastic flower inside jar to attract butterflies. Pour nectar into jar. Screw lid on tightly. Turn jar upside down over a sink. Make sure nectar does not flow out too fast. It should just soak into cotton so it is wet enough for butterflies to drink. If too much water comes out, stuff more cotton through hole. Attach string or twine to jar so it can hang about 3 feet down from a tree branch. Hang during butterfly season, June-September.





## Cotton-top tamarin

Born: Dec. 15, 2010  
Small Mammals Building

Like a lot of youngsters, sisters Vega and Lyra didn't quite know how to react to the birth of their new sister, Cassiopeia. No longer the babies of the family, the 11-month-old cotton-top tamarin twins wavered between consternation and curiosity as they adjusted to a fifth family member. The day the baby was born, Lyra followed her to the ground after she took a tumble from mom Carina's back. Lyra wasn't concerned as much as she was intrigued. Suddenly, the little cotton-top tamarin hopped aboard Lyra's back, ready to be hoisted up to the family nest box. Lyra, stunned, dashed frantically across the exhibit trying to rub the baby off on the branches before reluctantly carrying the rascal home, where Cassiopeia eventually climbed back over to mom. After a month, however, nearly all sibling angst faded into affection. The twins not only began helping groom the baby but were also eager to hold her. Vega was so eager at one point that she tried to pull Cassiopeia from Carina's back. Carina swatted the puffy, white "cotton top" on her daughter's head, warning her not to

try it again. And as each sister continues to care for the baby, Cassiopeia has even adopted some of their spunk and energy. While Vega and Lyra spend all day darting through the air and across branches, the little one likes to dart between her sisters and parents to sample bits of solid food such as bananas. Area supervisor Rhonda Crenshaw says the twins have been very attentive and protective like cotton-top tamarins instinctively are. "It's really good for the sisters to be helping with the baby because cotton tops need to have personal experience raising young to be successful parents," she says. "They're practicing for when they have their own babies."

## Female elk

Arrived: Sept. 8, 2010  
Elk Yard

She dashes in a flash and sprints in a glint. A lively new female elk named Cheyenne has infused a whole lot of life into the Milwaukee County Zoo's North America area. "The elk yard has gotten an injection of youth," says area supervisor Dawn Fleuchaus. "It's a different exhibit to see now when you can watch an animal sprint across the yard in two seconds." At 2 years old, Cheyenne is one of the youngest elk the exhibit has housed for the past several years. The Zoo's last female elk, Laurie, was euthanized at age 20 in December 2010 after suffering from joint arthritis that made it hard for her to get around. With the energy of youth, the new lanky female has also stirred up life for the Zoo's 12-year-old male elk, Comanche, particularly during mealtime. "He wants first dibs on his food [plant-based pellets]," Fleuchaus says. "If Cheyenne approaches and appears interested in his pellets, he'll lower his antlers and flash her a look to back off." Otherwise, the two share a mutual respect. When it comes to zookeepers, however, Fleuchaus says the young elk is still warming up. "Cheyenne won't come up to the fence when we're there, but when we turn to leave she'll charge right up, even curling her lip and snarling." She remains on good terms with her newfound feathered friend Sandy the sandhill crane, according to Fleuchaus. Sandy has been living in the elk yard since April, and the female elk moved in last December. "They get along famously and don't bother each other at all."





## Bonobo

Born: Nov. 19, 2010  
Apes of Africa

Claudine the bonobo has grown up almost overnight. Giving birth will do that. At age 8, she became a mom for the first time, and “she’s a superb little mother,” says Barbara Bell, the primary bonobo keeper at the Milwaukee County Zoo. “Claudine’s best friend is little Deidre, who’s just a year behind her. They went from two little kiddies playing rope and children’s games to Claudine getting this amazing little thing, a baby. From Deidre’s perspective, Claudine is nowhere near as fun as she used to be. There’s a level of seriousness and responsibility now. Deidre lost her wild playmate. At the same time, Deidre is terribly curious about the baby, and she wants a baby of her own.” Bonobos are perhaps the most social and communicative of the four great apes (the others being gorillas, orangutans and chimpanzees). Everyone in the group dotes on the new male baby. “All the bonobo females want to be little mommas,” says Bell. “I can’t fathom what’s going through that little peanut noggin, but Deidre is likely thinking: ‘How do I get one of those little things?’ It’s probably very frustrating. It’s like, ‘How’d you get that? I want a new baby, too.’ You know how children are.” And bonobos are a lot like children, Bell says.

They’re fun to watch, and babies create even more charming chaos in the dynamic bonobo *mélange*. The new male, temporarily called K-2 until he gets an official name, joins little Kitoko, who was born Feb. 1, 2010, to mom Zomi and dad Makanza and who clings to her mom. There’s also toddler Faith, age 6, who was born to mom Maringa and dad Viaje, but Maringa died in 2010; so Faith is being raised by Zomi, her half-sister.

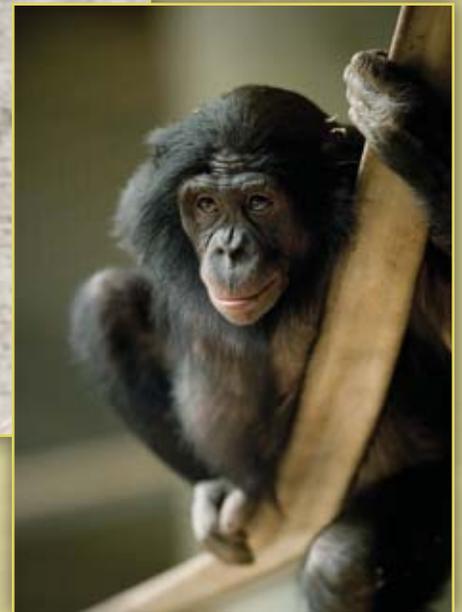
The Milwaukee County Zoo has 17 bonobos, one of the largest groups in captivity in North America. They’re highly endangered animals, and the success that the Zoo has had breeding bonobos is important to the species. Our Zoo also has provided valuable information to zoos around the world on how bonobos grow in the womb. Thanks greatly to training by Barbara Bell, the bonobos have learned to accept ultrasound screenings. “Pregnant bonobos get an ultrasound at least once a month on average, if they’re willing,” says Bell. The screenings have become a great pool of baseline data on what’s normal and not in a bonobo pregnancy.

So make sure to visit the bonobo moms and their babies. And, by summer, you’ll be able to see the bonobos in a new light – literally. They’ll be venturing into a new outdoor exhibit – the first time zoogoers can see them outdoors (see page 8).



Claudine and baby

Mark Scheuber photo



Deidre



# Sponsor a Butterfly or a Fox... and Get Flowers\*

Sponsor a monarch butterfly.\*\* *Great Graduation Gift!*

Give a butterfly sponsorship to that special student emerging into a new life and get a plush-toy monarch plus a seed packet filled with a mix of butterfly garden plants. Visit the Milwaukee County Zoo's special butterfly exhibit opening May 28 (page 11).

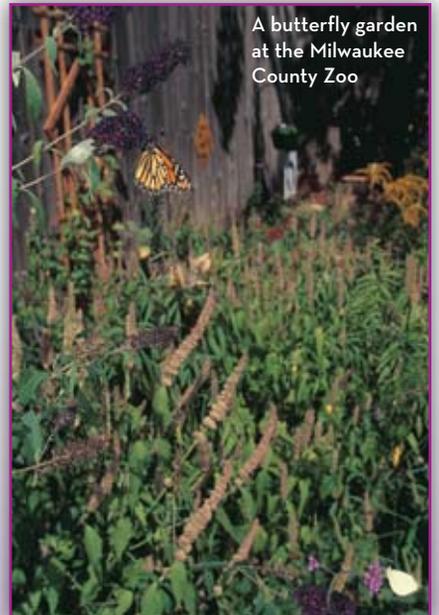
Order online at [www.zoosociety.org](http://www.zoosociety.org) (click on monarch picture).

*Great Mother's Day Gift!*

Sponsor Daisy, the Zoo's new fennec fox.\*\*\*

Get a plush-toy fox plus a bookmark that turns into flowers. That's because the seeds are embedded in the biodegradable card. Simply plant the card and water it, then wait for flowers to bloom.

See flyer packaged with this magazine or order online at [www.zoosociety.org](http://www.zoosociety.org) (click on fennec fox picture).



A butterfly garden at the Milwaukee County Zoo

## Both packages include:

- An invitation to an August behind-the-scenes event for animal sponsors at the Zoo
- Fun animal fact sheet plus a certificate of sponsorship and a Sponsor an Animal decal
- Sponsor recognition on our "All in the Family" donor board for a year

Order packages online at [www.zoosociety.org](http://www.zoosociety.org) or call us anytime at (414) 258-2333.

\*Cost is \$25 for the butterfly sponsorship and \$30 for the fennec fox sponsorship, plus \$5 shipping and handling (per package). See Web site for more details, tax information and Zoological Society financial statement. \*\*Monarch offer good through Aug. 31, 2011. \*\*\*Fennec fox offer good through June 30, 2011. Payment and order must be received by April 29 to guarantee delivery in time for Mother's Day, May 8.