Alive

Special Exhibit:
Dogs & Wolves

European Zoos Vs. Ours

She Sponsors 28 Animals!

An insider magazine for members of the Zoological Society of Milwaukee · Winter 2004

ZOOLOGICAL SOCIETY OF MILWAUKEE

CONSERVE • EDUCATE • SUPPORT

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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Editor
Paula Brookmire

Alive Writers
Fran Bauer
Elaine Bergstrom
Paula Brookmire
John Rondy
Jo Sandin
Sandra Whitehead

Kids Alive Writers
Paula Brookmire
Donna Hunt
Rebecca Towers
Sandra Whitehead

Graphic Designer
Roberta Weldon

Printer
NML Graphics

Photographer
Richard Brodzeller
(unless otherwise noted)

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President's Letter

We're excited about our initial success with our Capital Campaign to improve the Milwaukee County Zoo. The Zoological Society's public-private partnership with Milwaukee County has had remarkable success. The public phase of our campaign is off to a great start, and we want to share with you, in photos, some of the highlights of last year and the progress we're making in 2004. As a result, we're adding extra pages to *Alive* magazine this year.

In this issue, you'll find pictures on pages 16-19 with brief reports on last year's campaign highlights:

- Completion of our new Animal Health Center, thanks both to large-gift donors and to our Annual Appeal donors (pages 16 & 17)
- Groundbreaking for a new education building called the Karen Peck Katz Conservation Education Center (page 18)
- Receipt of the largest gift so far to our Capital Campaign: $2.5 million from U.S. Bank

We're also giving you insight into what we're planning for the future, particularly with renovation of the Feline Building starting this year and the Giraffe Building, starting in 2005. See page 8 for a story on Deputy Zoo Director Bruce Beehler's trip to Europe to get ideas for our projects.

Our goal is to get all of our members involved in helping improve the Zoo, in whatever amount they can afford. Each of you can make a difference. We hope by showing you how much of a difference individual donors already have made, we'll encourage you to help us with the rest of the campaign. Besides giraffes, felines and the education building, we're building a new atrium entrance to the Zoo starting in 2005 (page 19) and renovating Heritage Farm starting later this year.

Please see the back page for how you can help the campaign through our Annual Appeal for our education building. This is a project dear to the hearts of many of our members, especially those who have been turned away from our education workshops or summer camps because we were filled to capacity. The new building will give us tremendous additional capacity, especially during the academic year. It's what you have been asking for, and now we hope you'll help us build it.

We're also devoting extra pages each issue to let you know about our progress with our major conservation projects. In this issue, you'll see some of our success with our international Birds Without Borders-*Aves Sin Fronteras*℠ project (page 24). You're part of our success. So read on to see how we're helping the Zoo, conservation, and the education of children.

Gil Boese, Ph.D., President
Zoological Society of Milwaukee

Alive

WINTER • January-March 2004 Volume 24, Issue 1

FEATURES

DEPARTMENTS

Niijii the wolf

Niijii (left) and Hickoro

Nikan

KIDS ALIVE

On the cover

Nemat, the Zoo's alpha male timber wolf: See pages 3-7.

A Dog's World Comes Alive

Imagine a night 14,000 years ago. A Stone Age family warms itself around a flickering campfire. Chances are, says psychologist and dog trainer Stanley Coren, "you might well have seen a dog that looked much like any dog… resting at your feet today."

The author of "The Pawprints of History: Dogs and the Course of Human Events" (Free Press, 2003) marvels at the long association between humans and canines. At various times during the 140 centuries that dogs and humans have shared their food, dwellings and lives, dogs have served as guides, protectors, transporters, herders and companions. Yet there's still much we don't know about our "best friends," he says.

Sophie and Doobie of Bayside are a mix of golden retriever and standard white poodle.

An exhibit coming to the Milwaukee County Zoo offers a comprehensive look at canines and explores what makes our relationship with them so unique. PEDIGREE'S DOGS: Wolf, Myth, Hero & Friend, presented by U.S. Bank, will be at the Zoo Feb. 9-May 2 in the Otto Borchert Family Special Exhibits Building. It is the largest and most comprehensive traveling exhibition ever created to explore the history, biology and evolution of dogs and the role of dogs in human societies.

It was developed by the Natural History Museum of Los Angeles County. PEDIGREE Food for Dogs made possible the national tour of this exhibit with support from the National Science Foundation. U.S. Bank is sponsoring its Milwaukee exhibition.

"This exhibit uses our familiarity and love of our four-legged friends to explore science and biological concepts," says Linda Abraham, vice president of education at the museum and principal investigator for the National Science Foundation grant that helps support this exhibit. Four themed sections together offer a comprehensive look at dogs, their relationship with humans and how their roles have changed over time:

1) Dog diversity: There are hundreds of domestic breeds of dogs, from the pocket-sized Chihuahua to the 200-pound Saint Bernard.
2) A comparison of dogs with wolves, examining such things as wolf traits that have been bred out of dogs.
3) Ways dogs and people have worked together for millennia, using dogs' amazing skills – from an incredible sense of smell to a stamina for long-distance running.
4) Problems our modern world poses for wild and domestic dogs – pollution, hunting and habitat destruction – and what we can do to help them.

Through multimedia and hands-on interactive displays you can:

- Learn to read a dog's body language and translate its barks and howls
- Climb through an avalanche scene to discover how a search-and-rescue dog saves lives
- Test your knowledge of dogs, for example, why they love to fetch (researchers think dogs see balls and Frisbees as prey).

The exhibit offers plenty of evidence about why we formed such a close relationship with dogs, and not cows or chickens.

By Sandra Whitehead

Visit Niijii (right) and the Zoo's other timber wolves after viewing the dogs' exhibit.

Member Premiere

February 7 & 8, 2004

Zoological Society members get a chance to view PEDIGREE'S DOGS: Wolf, Myth, Hero & Friend, presented by U.S. Bank, before the exhibit opens to the public. Look for your invitation to a special members' premiere in this package with *Alive* magazine. The Zoological Society, the Milwaukee County Zoo, and U.S. Bank all helped bring this exhibit to the Zoo.

Choosing a Canine Companion

Milwaukee veterinarian Amelia Toomey has some tips on choosing a dog that will love you and won't be too aggressive. Toomey, who works exclusively with humane societies in southeastern Wisconsin, has years of experience as both a veterinarian and an avid dog lover. Her advice on choosing a compatible dog:

- **Study the breed.** Different breeds have different temperaments.
- **Get the dog's history.** Dogs that have not had much human contact from an early age may be fearful.
- **Observe the dog's behavior.** "You can often tell how a dog will be with you at the first meeting. Look for a dog that readily comes to you and wants attention. Be very leery of a dog that is aloof or acts fearful. Fearful dogs will often bite, and even if you win that dog's trust, you can never be sure how the dog will act with strangers."

With a friendly dog, building a bond is usually easy, she says. "Dogs bond with the one who feeds them, takes them for walks, takes care of them. I think they look at that person as their human." Toomey recommends taking a new dog to a basic obedience class. "It helps owner and pet establish the ground rules and teaches the dog to respect his human."

–SW

Teaming Up

As zookeepers Laurie Talakowski and Collette Konkel approach Wolf Woods one autumn afternoon at the Milwaukee County Zoo, five adult timber wolves step out into the open from behind bushes and brush in the back of the yard. They stroll toward the women. "See the one with long legs," Talakowski says to an observer. "That's Niijii." Niijii has a large head, dark face and a lean body. He's the one most willing to come up to zookeepers.

Talakowski goes into the exhibit to rub some medicine into a wound on Niijii's ear; Konkel follows. Talakowski and Konkel are fortunate to be able to go inside the wolf exhibit. Most zookeepers don't go into exhibits with the animals, for safety reasons. These women are members of the wolf team, seven zookeepers who volunteer their time, before or after their regular shifts, to train the wolves. Talakowski got the idea of forming the team even before these 5-year-old wolves were born, when she was working with the Zoo's elderly Arctic wolves. They needed to be treated with insect repellent, but how do you get a wolf to hold still to be sprayed?

Laurie Talakowski checks Niijii's mouth for possible sores.

"The big moment came for me when I was feeding them one day," Talakowski says. Each wolf was supposed to get one 5-pound tube of meat. Akela, the big male, started to grab two. If he ate both, one of the females wouldn't eat. "I told him to put it down and he did," she recalls. "I was stunned that he listened to me."

That's when she realized building trust between keeper and wolf was essential to caring for the animals. To check the wolves thoroughly, apply medicine and tend to their needs, zookeepers needed to get close. She continued getting to know Akela and the other Arctic wolves until the last one died almost seven years ago.

In 1999 Talakowski was assigned to go to Minnesota's Wildlife Science Center to bring back five timber wolf pups to our Zoo's new Wolf Woods exhibit. She and some like-minded zookeepers – Jaqui Mundell-Wachowiak and Earl Conteh-Morgan – formed the wolf team. They are still on the team, although others have left and new members have joined, including Konkel. The other current team members are Dawn Fleuchaus, supervisor of the Animal Health Center, and Joan Volpe and Beth Roszak, pachyderm zookeepers.

The team holds three types of training sessions with the wolves almost every day to provide the best possible care for the animals. In socialization training, wolf team members go into the yard to get the wolves used to interacting with humans.

Target training separates one wolf from the others to treat it individually. A zookeeper stands outside the fence, holds a target up to the fence and calls a wolf. If the wolf comes and puts its nose on the target, it is given a piece of meat as a treat.

The kennel session aims to get a wolf comfortable with going inside a holding facility. "Wolves don't like to be locked in," says Conteh-Morgan. "They'd be breaking their teeth on the fence, trying to get out. We avoid locking them up, but sometimes it's necessary." When a wolf team member is there, the wolf is less fearful about being in a holding facility, he says.

No matter how familiar they get with the wolves, zookeepers are always cautious. Although this pack has never been aggressive toward humans, they are not domesticated like pet dogs, the women say. "When a goose or bird is unfortunate enough to land in the yard, it doesn't stand a chance," says Talakowski. "I once saw them pull a raccoon through the fence."

On the autumn afternoon that Talakowski and Konkel went into the wolf exhibit, they did so to apply medicine to a wound in Niijii's ear. Afterward, they left the exhibit and talked to an observer while watching the wolves circle and nudge each other with their noses. "That's pack behavior," says Konkel. "No matter how much they accept us, they will never see us as part of the pack." Adds Talakowski, "We're separate but equal. It's all about mutual respect."

By Sandra Whitehead

Tracking the Pack

For close to 30 years, timber wolves have been migrating into Wisconsin from Minnesota and multiplying. Wolves in Wisconsin now number 335-354, according to the Department of Natural Resources. Their numbers are high enough that the Wisconsin DNR held statewide hearings in November on a proposal to remove wolves from the state's threatened-species list. Despite this increase in the overall number of wolves, individual wolf packs remain very small. Wildlife experts are not sure why.

After two years of tracking wolf packs, researcher Ellen Heilhecker has found some disturbing answers that may help to explain why the size of their groups isn't growing. Her research could affect how the DNR manages wolves.

Heilhecker is a graduate student in natural resources at the University of Wisconsin – Stevens Point who has loved wolves ever since seeing her first pictures of them as a girl. Two years ago she decided as her master's thesis to track what happens to wolf pups (under a year old). She located several wolf packs near Black River Falls and the Necedah National Wildlife Refuge as well as on privately owned cranberry bogs in Jackson and Wood Counties.

The Zoological Society gave Heilhecker $4,000 in research grants, enabling her to place transmitters in the ears of the pups she trapped. "I had no way to follow the pups until the grants," she says. Now, with an antenna mounted on her truck, she follows as the pups move. She works cooperatively with DNR wildlife experts who use airplanes to track wolves they've equipped with radio-transmitter collars.

Heilhecker's research focused initially on following 10 pups from just three packs. By her second year, she was building upon that research by tracking six pups in five packs. Some pups came from the packs she had observed earlier. Sadly, she found that four of the first pups she'd tracked already had died, though she found only one of them in time to analyze what caused its death. The pup had contracted mange, a tiny mite that burrows beneath the skin, causing such intense itching that the pup had scratched off much of its fur and was 50% bald. It's hard to know if the mange lowered the pup's immune system, making it more prone to a fatal case of distemper, or if the animal was too weak from mange to find enough protein to overcome the disease.

What surprised her was the speed with which mange was spreading. The mite can survive for weeks; so a pup can catch it simply by lying down where an infected animal has been. "We saw wolves that were 50% to 85% bald. And if the wolf doesn't grow its hair back in time, it will freeze to death in the winter."

Another pup Heilhecker was tracking was killed after being hit by a car. A mother and her pups had gotten into the habit of playing in the middle of the highway.

A major surprise cause of death came when a farmer found one of the pups dead in his field. She had been shot. He saw her tag and reported it. The surprise? The farmer was in Indiana. This was the first Wisconsin wolf known to have migrated south of Wisconsin. If one went south, others could, too – heading into population centers.

The federal protection status of timber wolves has been downgraded from endangered to threatened, but public hunting of wolves still is not allowed even though some farmers who have lost cattle to wolves are pushing for the right to kill the predators. Federal agents will kill problem wolves, and agents killed 17 wolves between April and November last year in Wisconsin. Wisconsin DNR officials, however, would like more flexibility in dealing with problems.

"Results of my study will give the DNR new information to better predict the state's wolf population growth and aid in wolf management," says Heilhecker.

By Fran Bauer

Photo by Ellen Heilhecker

Inspired Designs from Europe

When designers were developing plans for the Milwaukee County Zoo in the 1950s, they looked to Europe for innovative ideas. As a result, our Zoo has a national reputation for exhibits that allow you to see both predators and prey in one vista – lions overlooking kudu, cheetahs overlooking impala, jaguar overlooking tapirs. Our Zoo also is known for its many exhibits where the animals, instead of being behind bars, are in outdoor yards surrounded by nearly hidden moats or behind large glass windows for easy viewing. Predator-prey yards and outdoor moats were borrowed from European zoos.

Now, almost a half-century later, our Zoo once again is reaching across the Atlantic for inspiration in renovating the Feline and Giraffe Buildings. The renovations are part of a nearly $30 million Capital Campaign run by the public-private partnership of Milwaukee County and the Zoological Society. Feline Building construction begins this year at an estimated building cost of $6.2 million. Giraffe Building construction will begin in 2005. The Pachyderm Building renovation is farther in the future.

Beautiful wood surfaces frame large giraffe stalls at the Cologne Zoo (right). Giraffe stalls at the Milwaukee County Zoo (left) will be revamped completely, using some of features from Cologne. Photos of European zoos are by Bruce Beehler.

Last February Deputy Zoo Director Bruce Beehler traveled to eight zoos in eight days: two in the Netherlands and six in northern Germany. He wanted to get a firsthand look at how European zoos in northern climates (like Wisconsin's) have designed indoor animal exhibits, visitor areas and behind-the-scenes service areas. Animals in northern zoos spend a lot of time indoors because of cold weather. U.S. zoos are known for innovation in outdoor exhibits, but most indoor feline, pachyderm and giraffe exhibits look about the same, says Beehler. "We were looking for a fresh set of ideas. So we turned our eyes to Europe."

Zoos have a history of sharing information and ideas, Beehler says, including about big building projects. "It becomes very cost effective to do this because we can learn what doesn't work and avoid costly errors while getting innovative ideas that can improve our final product," he says. "The ideas that I brought back ranged from the overall design concept down to some tiny engineering details [such as door closures]."

Armed with a camera and pad and pen, Beehler visited a group of zoos recommended to him by both the World Association and the European Association of Zoos and Aquariums. European zoos have a very active zoological association, he says, and there are many famous zoos. He used the limited time he had to focus on indoor spaces for felines, pachyderms and giraffes. He spoke with zookeepers, curators, veterinarians and directors in depth about what they liked and didn't like about their exhibits and animal service areas.

An example of an important detail Beehler gleaned from the Leipzig Zoo in Germany was a device to lock doors that allow animals to shift from one space to another. These doors may be in areas where it would not be safe for zookeepers to go. So they need a remote way to lock the doors. The Leipzig Zoo has perfected

Realistic murals help set the stage for Leipzig Zoo's indoor lion exhibit. Milwaukee's lion and hyena exhibit has a less natural look, but murals will be used in our renovated Feline Building.

a mechanical cable that lets keepers open, close and lock vertical-sliding doors (called guillotine doors) remotely. "This may seem minor, but it's always a problem that we have with guillotine doors," Beehler says. "They solved it in a way that I've never seen before, and avoided using expensive hydraulic equipment. That's something we can incorporate in the Feline Building if we need to.

Other ideas that Beehler encountered in Europe that may be used here include:

- Larger, more natural-looking indoor exhibits for the big cats.
- Exhibits that effectively allow animals to use the entire volume of their space (not just the floor), climbing up logs or rocklike outcroppings to the ceiling.
- Instead of hard concrete-type floors, a ground, or "substrate" of sand and mulch so that big cats, for example, can dig and roll.
- Maybe even real trees, which cats often destroy; the Frankfort Zoo has had some success with indoor exhibit trees for tigers.
- Realistic murals that give the public a heightened feeling of the animal's natural habitat. Some Milwaukee County Zoo exhibits, such as Temple Monkeys of Tikal, already have such murals.
- Many more props or indoor furnishings that create an interesting and enriching environment for the animal (see story on page 14).

"These animals have mental and physical needs that we must meet, and part of that is to give them an interesting environment

Graceful mesh surfaces enclose a large outdoor snow leopard exhibit at the Cologne Zoo. The Milwaukee County Zoo's current snow leopard exhibit (left) is much smaller. Our new exhibit will include mesh and public viewing glass overlooking cliffs, ponds and waterfalls.

where they can display their normal range of behaviors," says Beehler. There's a balance, however, between making an exhibit that tries to duplicate a natural habitat and making an exhibit that's safe for the animals and keepers, and practical to clean.

Our Zoo's Pachyderm and Feline Buildings were built in an era when zoo philosophy emphasized maintaining the sanitation and health of the animals. Indoor exhibits used glass to separate animals from the public, and the exhibits could be cleaned easily. But the exhibits were boxlike and did not have a lot of props or natural-looking areas. Compare our lion exhibit (see photo at top) with the Leipzig Zoo's lion exhibit, says Beehler. This German exhibit is open and has a natural-looking mural backdrop and lots of props (see photo). That's what we're aiming for with the new Feline Building, Beehler says.

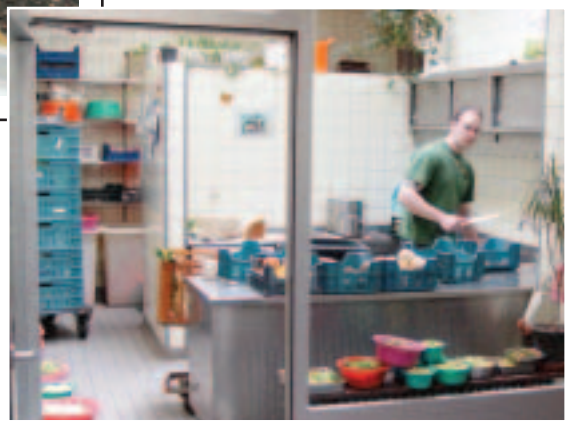
"We have been doing this throughout the Zoo as we have renovated buildings such as the Herb & Nada Mahler Family Aviary, the Apes of Africa pavilion, Primates of the World, the Aquatic & Reptile Center and Wolf Woods. We want to give the animals more space, a more enriched environment, and we want to improve people's perception of the animals."

On his visit to the Cologne Zoo in Germany, Beehler was impressed by the giraffes' interior stalls, which have in-wall heating panels and metalwork that is both easy to clean and attractive. They also have nice-looking wood panels (see photo) and an unusual touch: giraffe-high mesh to which zookeepers attach small trees and leaves for the giraffes to eat. "You normally don't see a giraffe stall like that," Beehler says. "It represents a new, intriguing combination of ideas."

Will we use that here when we renovate the Giraffe Building? Maybe. "We want to start with new stalls and new materials," Beehler says. "The interior stalls we have now (see page 8, left photo) will be completely removed." One design is definite in the plan for our giraffe exhibit, though, and it is not something he saw in Europe. We want an exhibit area that lets visitors view the giraffes at both ground and eye level, Beehler says.

Bruce Beehler (right) views an attractive indoor elephant facility at Wuppertal Zoo in Germany; it has pools and an open look. Indoor pools are planned for many of the renovated animal exhibits at Milwaukee.

Only a glass window separates Leann Roth of Milwaukee from a tiger at the Frankfurt Zoo in Germany. Newer exhibits in Milwaukee use the same idea (page 15).



Animal food preparation is on public display at the Berlin Zoo in Germany but not at the Milwaukee County Zoo.

Other intriguing things Beehler saw in Europe:

- Animal food-preparation areas that were on view to the public. The only time our zoogoers can see these areas is during twice-a-year behind-the-scenes weekends.
- An outdoor snow-leopard exhibit with a wire-mesh "roof" to contain the leopards, which are agile jumpers. This has been done in U.S. zoos, but Cologne Zoo's exhibit was especially attractive. Compare that to our smaller outdoor snow-leopard exhibit with a roof of metal bars (see page 9, middle photos).
- Pools in indoor exhibits, even for large animals like elephants. (see top photo this page).
- The feeding of big cats and other carnivores whole or partial meat carcasses to simulate how they eat in the wild. In U.S. zoos, big cats are fed a nutrient-enriched mincemeat diet plus bones to chew on for dental health.

"There's really two different philosophies on how to feed animals," says Beehler. "They've got half-cows hanging there, or freshly slaughtered goats that they 've put in whole for the animals. The disadvantage of the way the Europeans do it is the logistics. To procure and store and handle these carcasses on a regular basis is a very challenging task. It's very labor-intensive."

While Beehler thinks we will incorporate the mesh-roof concept for our renovated snow-leopard exhibit, he's not sure we're ready to feed our carnivores whole carcasses. Visitors will see many of the European ideas in our new Feline Building, though.

Beehler shared some of our ideas with the Europeans, too. The director of the Leipzig Zoo, for example, was very interested in our practice of installing safety nets for bears that fall into moats. He asked for construction details. Glad we could help.

By John Rondy

Winter 2004 Zoological Society of Milwaukee (Wisconsin) www.zoosociety.org

Kids Alive!

A Tip from Dogs:

Jump & Run!

All dogs need exercise—every day, all year-round. Whether it's a tiny Chihuahua or a big St. Bernard, every dog needs to run, jump and play outdoors to be healthy. Exercise is good for a dog's heart and other muscles, lungs and blood circulation. Unfortunately, 25% to 50% of U.S. dogs are too heavy and not in shape. Many children are, too. A daily walk outside also improves a dog's spirit, says Davia Anne Gallup, author of the 1986 book *Running With Man's Best Friend* (Alpine Publications). Without a daily walk, some dogs become bored and unhappy and can tear up things in the house.

How much exercise does a dog need? That depends on its age, breed and condition. Puppies get lots of exercise, leaping and exploring. It's good for them, except right after eating, says Gallup. Middle-aged and older dogs may need balls and other toys to get them to run, she says. Dogs love to play catch. To learn more, visit the special exhibit on dogs at the Milwaukee County Zoo Feb. 9-May 2 (see page 4). PEDIGREE'S DOGS: Wolf, Myth, Hero & Friend is presented by U.S. Bank in the Otto Borchert Family Special Exhibits Building.

By Sandra Whitehead

See if you can guess how much exercise each of these dog breeds (types) need. Draw a line from the breed to the time needed to walk. (Note: Two of the breeds need the same amount of walking time.)

1. Toy breeds, like toy poodles	A. two to three hours a day
2. Small breeds, like terriers	B. two half-hour walks per day
3. Medium breeds, like spaniels or collies	C. two hour-long walks per day
4. Large breeds, like German shepherds or greyhounds	D. one to two hours daily
5. Giant breeds, like Saint Bernards and great danes	

ANSWERS:

1) B; 2) C; 3) A; 4) A; 5) D.

Math Mystery Message

Wolves Niijii and Hickoro

Wolves are very social animals – just like people. Wolves usually live together in ***groups*** of six or seven, but some ***groups*** are much larger. Most groups are families: the parent wolves, their young and other closely related wolves. The parents, which stay together for life, normally lead the ***groups***. After decoding the message below, find a new word to use in place of the word ***groups*** above.

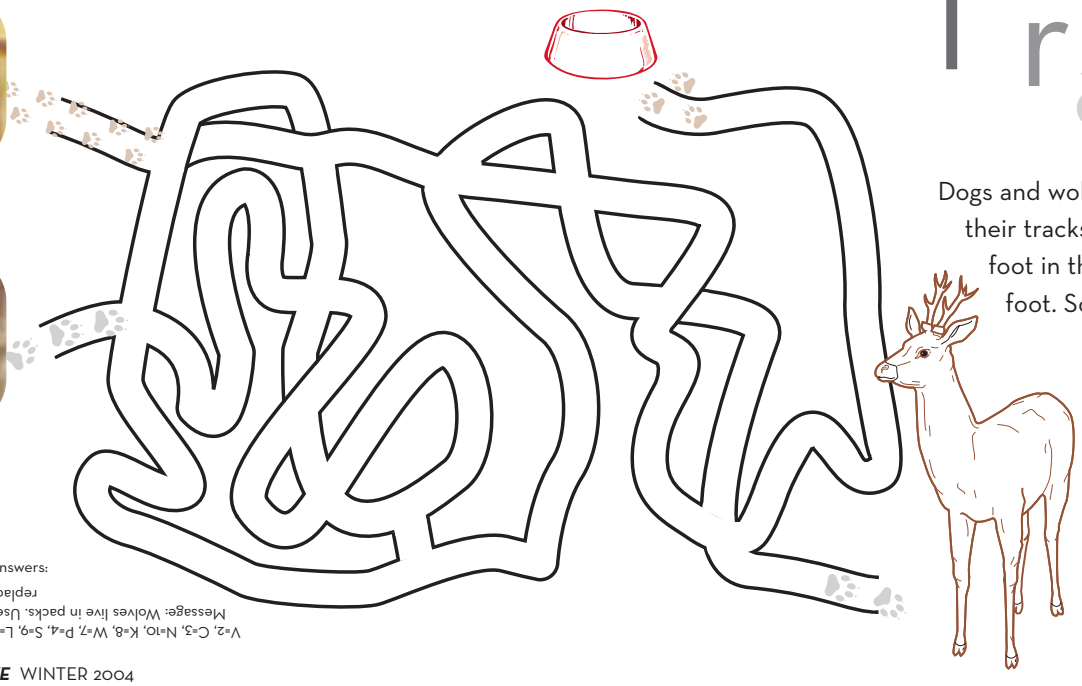
Use your math skills to solve the math problems below. Write the answer to each math problem on the blank below it. Use the letter next to your answers to decode the message below. Write the letter on the blank above the number it matches. Reread the paragraph above using the new mystery word in place of the word ***groups***.

5 −4 = ___ = L	7 −7 = ___ = E	6 +5 = ___ = O	8 −3 = ___ = A	4 +2 = ___ = I
2 +0 = ___ = V	9 −6 = ___ = C	5 +5 = ___ = N	7 +1 = ___ = K	9 −2 = ___ = W	2 +2 = ___ = P	6 +3 = ___ = S

Mystery message:

___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
7	11	1	2	0	9	1	6	2	0	6	10	4	5	3	8	9	

MAKING Tracks



Dogs and wolves can be identified by their tracks. A wolf places its hind foot in the track left by the front foot. So wolf tracks look like a straight line. A dog's tracks create a zigzag pattern because the front and hind foot tracks do not overlap each other. Use a pencil to follow the tracks from the wolf and dog to what they like to eat.

Mystery Message Answers:

V=2, C=3, N=10, K=8, W=7, P=4, S=9, L=1, I=6, A=5, O=11, E=0

Message: Wolves live in packs. Use the word ***packs*** to replace the word ***groups***.

Dog Language

Wolves and dogs are members of the same family. They communicate with each other by using sounds, facial expressions and body postures that are part of their "language." If you have a dog, observe its body language at home. If you don't have a dog, come to the Milwaukee County Zoo and watch the timber wolves play in Wolf Woods.

Below are typical postures for dogs and wolves and what the postures mean. Compare your observations to the drawings here.

"I want to play."

Front legs are stretched out in front. The head sinks low to the ground as if "bowing." The ears are forward and the tail is up and wagging.

"I'm in trouble and I know it."

Animal's head is lowered, its ears are back, its fur is flat and its eyes look away. The tail often is tucked between its hind legs.

"I'm in charge."

It's head is high, ears forward and eyes staring directly ahead. The tail is held high, and the fur is fluffed.

Make a *Wolf* or *Dog* Puzzle

Here's what you'll need:

- 8½- by 11-inch piece of paper without lines (any color)
- 8½- by 11-inch piece (or larger) of lightweight cardboard (inside of a cereal box works well)
- Glue or paste
- Child's scissors
- Colored markers and/or crayons
- Sandwich-size plastic bag that zips close

1. Ask permission from adults before collecting materials for this project.
2. Draw a wolf or a dog on the blank paper. Color your picture. You can use our example at right.
3. Now, put glue on the blank side of the cardboard. Hold your picture so it faces you and lay it on the glued side of the cardboard.
4. Use scissors to trim the edges evenly.
5. Use a marker or crayon to draw a puzzle pattern over your picture (see dotted lines above). Or, flip it over and draw the puzzle pattern on the back. Be sure to draw the pieces large enough to cut easily.
6. When glue is dry, cut along the marker lines to cut apart the puzzle pieces.
7. Mix up the pieces and have fun putting your picture back together! Store the pieces of your puzzle in the plastic bag.

Another method: You also could paste a picture of a dog or wolf from a magazine onto cardboard and then cut it into puzzle pieces.

From left: Nikan, Hickoro, Niijii, Nemat and Koda

Kids Alive

Are Those *Toys?*

ZERO the polar bear loves to play with his new white plastic "iceberg." Brittany the elephant enjoys rolling her green plastic ball through her pool. Even the Zoo's turtles seem intrigued by toys.

What's going on with all this fun at the Zoo? "Our goal is to keep the animals from getting bored," says Dawn Fleuchaus, supervisor of the Animal Health Center. She has been actively involved in what are called "enrichment" activities and devices for animals at the Milwaukee County Zoo. Enrichment can range from "toys" to "fruit-sicles," which are food treats frozen into blocks of ice. Enrichment could be anything that is outside the animal's regular routine, she says. Often the enrichment gets an animal to do things it would do in the wild, such as search for food. When you put something new in an animal's exhibit, such as a tube with holes and food hidden inside, it creates curiosity, she says. Zookeepers try to rotate enrichment so the animal can be surprised.

"Probably about 75% of the Zoo's mammals have regular enrichment," says Fleuchaus.

Next time you visit the Zoo, see how many enrichments you can find. Look for a plastic swing in the black bear exhibit (at left), a rope ladder or hammock in other bear exhibits, a white capsule or iceberg in the polar bear exhibit (see photo), tires and other toys for the elephants (see photo), the monkeys on Macaque Island playing with wind chimes (see photo) or their bell, the badger sniffing hair from the wolves, the bushbaby in the Small Mammals Building playing with a pinecone, or the tapir nosing a ball. Sometimes you will see zookeepers training the animals, and that is enrichment, too (see story on page 23).

By Paula Brookmire

A Milwaukee company called Kracor has worked with zookeepers for several years to develop tough polyethylene (a type of plastic) "toys" that animals can't destroy. The toys are in natural shapes like logs or rafts and natural colors like green, brown and white. Now the company sells the toys to other zoos.

Photos by Jennifer Richards

Some animals such as birds and reptiles don't get bored because their exhibits are very similar to the outdoors. Primates and other mammals, however, are curious and need to explore and keep learning.

20 YEARS, 28 ANIMALS & COUNTING

This is part of a series of stories on how people help the Zoo through the Zoological Society

Dianne Dziengel sponsored her first Milwaukee County Zoo animal through the Zoological Society 20 years ago. The Sponsor an Animal program had started in 1982, and she was one of the early sponsors.

As the program grew, so did Dziengel's support. She now sponsors 28 different animals: a tree kangaroo, an octopus, a giraffe, cheetahs, rhinos, prairie dogs, cranes, warthogs, bears, a red panda, a river otter, a rockhopper penguin, a camel, the wolf pack, and many others. Though the animals she's chosen seem diverse, there are common threads to her eclectic mix. For example, her love of exotic travel gives her an affinity for creatures from the African continent.

"The best trip I ever took was to Kenya," she says. "While I was there, I got to see a group of cheetahs. They were chasing down a gazelle. Unfortunately, they caught it about 2 feet in front of us. It looked like a young one, and the cheetahs seemed to be playing with it, trying to get the parents to come out. It didn't work; so they didn't get much of a meal." It was not a pretty sight, she adds, but it was part of the natural world that people living in cities often don't see. "I also got to see them in a full run, and that was amazing. I understand that they don't usually hang out together, but there they did. They were so beautiful; so I had to sponsor one."

Africa explains the cheetahs and rhinos. The camel sponsorship was a bit more personal – picked after a camel ride near the pyramids in Egypt. She's also sponsored a lot of cats. "I'm a Leo and I was born in the year of the tiger, which pretty much explains that," she says.

She also feels an affinity for wolves. "To me they are very independent even though they are pack animals. They seem regal to me. In addition, I'm very fond of the Native American philosophy. The wolves are a very strong animal to them and I can see why." The five timber wolves at the Zoo all have Native American names.

Dziengel has another theory about the wolf attraction as well. "My very first memory as a toddler was of the dog we had. To me, he appeared about the size of a St. Bernard or large wolf, but he was just a springer spaniel." Today her pets include two Alaskan malamutes that "are very wolflike."

The octopus sponsorship was an impulse buy. "The Zoological Society was having a special promotion and I had to have that stuffed version of the octopus. I keep it in my bathroom. As for the penguins, they are just so cute."

Along with sponsoring animals for herself, she also gives gift sponsorships. "I really enjoy doing that, especially when the Society sends along a little matching stuffed animal and a history of the animal being sponsored. I've given various animals to my boyfriend and to family members, including my parents. Sponsorship is a very unusual thing to give. People remember it."

One of the benefits of animal sponsorship is the chance to see your animal in its Zoo exhibit. Dziengel occasionally visits an animal, "but not as often as I would like." Given how many animals she has sponsored, she's likely at the Zoo more than most of us – and if they could, the animals surely would thank her.

For information about the Sponsor an Animal program, please call Julie Brellenthin at the Zoological Society main office, (414) 258-2333.

By Elaine Bergstrom

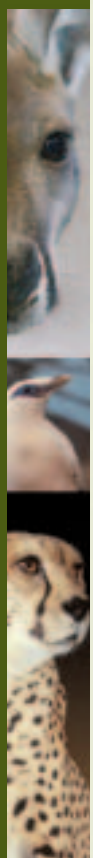
Premiering a New Hospital

Above: Posing with lab coats and stethoscopes at the September premiere are the people who helped give birth to the new Animal Health Center (from left): Zoological Society Board Chair Bonnie Joseph, Jerry Holz of Holz Motors, Inc., Atty. Steven Fisher (a trustee of the Gretchen & Andrew Dawes Charitable Trust), Zoological Society President Gil Boese and Zoo Director Chuck Wikenhauser.

Above right: Diane Shippell (in baseball cap), a program coordinator at Hales Corners Lutheran Elementary School, looks into the surgery room at the new Animal Health Center. With her are students (from left) Casey Kraemer, 6, Briana Luciano, 8 (in stripes), Madyson Wendorf, 7 (in green), Chloee Wendorf, 11 (red), and Gabrielle D'Amico, 17, a teacher assistant (background).

Nursing sick or injured animals back to health can be a tough job. Now it has been made a lot easier with a spacious new Animal Heath Center at the Milwaukee County Zoo. Many of you helped make this possible (see next page). Built as part of a Capital Campaign conducted by the public-private partnership of the Zoological Society and Milwaukee County, the new Animal Heath Center premiered last fall. At about 18,000 square feet, the new center is twice the size of the old Zoo hospital, allowing for more comfortable and efficient care for animals.

The Zoological Society is especially proud of the Holz Family Foundation Learning Zone, the hospital's visitor-education area. Here you'll find videos, the sounds of animal heartbeats, a lifelike diorama of an exam on a wildcat, and windows allowing you to view animals getting health care. You can learn what vets and other animal-health-care workers do, and learn ways to help save and protect endangered animals. Photos on these pages will help give you an inside look into our new hospital.



Teacher Debbie Kraemer and students from the Hales Corners Lutheran Elementary School listen to an animal heartbeat and try to figure out which animal it is. Students are (from left) Casey Kraemer, 6, Nicholas Kraemer, 7, and Michael Berndt, 10.

Isabelle Ludwikoski, 5, and her mother, Kim, of Menomonee Falls view a diorama of a lynx undergoing an endoscopic exam.

Thanks to Special Donors

The new Animal Health Center would not have been possible without these sponsors and donors:

- the Gretchen and Andrew Dawes Charitable Trust, which sponsored the Academic/Administrative Wing of the Animal Health Center. This Trust also has sponsored veterinary interns and residents at the Zoo.
- the Holz Family Foundation, which sponsored the Learning Zone visitor-education area in the Animal Health Center. This Foundation also sponsored the remodeled Holz Family Impala Country African Savanna and Bongo Exhibit.
- the Zoological Society's 2002-'03 Annual Appeal donors, who helped build the visitor-education area.

Exterior of the Holz Family Foundation Learning Zone

Dr. Roberta Wallace, the Zoo's senior veterinarian, makes notes on what books will go into the hospital's new library.

EdZOOcational Safari

Karen Peck Katz

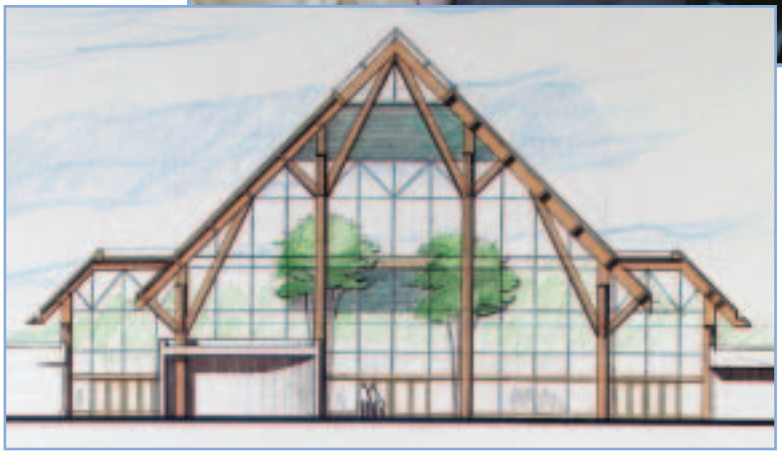
Thanks to Special Donors

- A lead gift from the Milton and Lillian Peck Foundation allowed us to break ground for the new building (they were Karen's grandparents),
- Donations to the Society's Annual Appeal will help us complete it.
- A major gift from the Halbert and Alice Kadish Foundation will make possible the Alice Bertschy Kadish Wing of the center, devoted to programs for school classes, including the investigation and discovery lab.
- A major gift from Jeff and Debbie Nowak of DMC Advertising and Direct Marketing will provide the entrance to the building's central atrium

A "wise" owl watched as children and adults used giraffe-spotted shovels (see photo above) to break ground Sept. 30, 2003, for a new Zoological Society education building at the Milwaukee County Zoo. To be called the Karen Peck Katz Conservation Education Center, the building (see drawing) is expected to open in time for the Zoological Society's fall 2004 edZOOcation workshops. Karen Peck Katz (at microphone) has been promoting wildlife education for children through her long-time work on the education committee of the Zoological Society board. This building is one of a series of projects in the New Zoo II Capital Campaign run by the public-private partnership of Milwaukee County and the Zoological Society. Several projects, including Macaque Island and the Holz Family Impala Country, have been completed. The education building marks the start of the campaign's public phase, called Expedition Zoo: Your Safari to the Future. The Zoological Society through its donors will finance nearly 100% of the $3.3 million building.

The hawk practices for its flight.

Hawk Delivers $2.5 million



Zoo Director Chuck Wikenhauser (left) watches U.S. Bank Wisconsin President Jay Williams tie the check to the hawk's straps. Next to Williams (left to right) are John Howard an executive vice president for U.S. Bank; Zoological Society Board Chair Bonnie Joseph; Milwaukee County Executive Scott Walker; naturalist Cathy Spahn with the hawk; Zoological Society President Gil Boese; and Zoological Society Capital Campaign Chair Jack McKeithan.

Left: Drawing of the glass-topped atrium.

A live Harris hawk soared through the air with a $2.5 million check Oct. 22, 2003, at the Milwaukee County Zoo. The check was flown from U.S. Bank Wisconsin President Jay Williams to Zoological Society Chair Bonnie Joseph. The donation goes to the New Zoo II Capital Campaign. Specifically, this gift will go toward a light-filled pedestrian atrium entrance to the Zoo, to be called the Gathering Place. The glass-topped atrium (see architect's drawing) will include an aquarium, animal sculptures, educational areas, small trees and plants indoors, an expanded restaurant, and an international gift bazaar. The Zoological Society has raised more than $8 million so far for its half of the $30 million campaign being conducted by the public-private partnership of Milwaukee County and the Zoological Society.

Belize & *Beyond*

Energizing Students about Conservation

How do you get high school students excited about conservation? Bring them to the birds! Field trips last September to Zoological Society bird-research sites in Wisconsin proved to be a fascinating introduction to Belize & Beyond, a new conservation education program developed by the Society and We Energies. Students got to see firsthand how researchers capture, identify and band birds, then record the data. A student from South Milwaukee who got to release a banded bird was so excited that he pulled out his video cell phone, snapped a picture of the bird and sent it to a friend.

Why Belize? Both We Energies and the Zoological Society have ongoing conservation programs in this Central American country and have had previous education programs there. Eight to ten students from among 600 in nine high schools in the Belize & Beyond program will be selected for a trip to Belize next summer to visit conservation and cultural sites.

The program teaches a variety of conservation and science concepts through birds."Why birds?" asked one student. Kerry Scanlan, Belize & Beyond project manager from the Zoological Society, answered: "Birds are environmental indicators. They are sensitive to disturbances such as pollution. By observing bird behavior and comparing numbers of each bird species from year to year, humans can monitor the health of the environment."

Dr. Noel Cutright, senior terrestrial ecologist with We Energies, shows a bird that has been banded to students from Brookfield East High School

◀ Sheboygan North High School students in the Belize & Beyond program try to figure out a path through the Rosendale prairie using a compass. From left are Havalyn Bruns, 16; Barb Caan (a chaperone); Tierney Endres, 17; and Alexandra Reyes, 17. The compass exercise helps students understand the complexity of bird migration.

A common yellow-throat is ready for release after banding.

During the visits to research sites (one in Pewaukee and one in Rosendale, which is west of Fond du Lac), students observed Dr. Noel Cutright, senior terrestrial ecologist with We Energies, gently band songbirds. Students also learned how to identify 20 common migratory and resident birds either visually or by bird calls or songs. A teacher from Port Washington reported later that her class enthusiastically practiced bird calls all the way back to school.

The second and third parts of the program occurred in October and November, when Scanlan and Matt Malten, Belize & Beyond project manager from We Energies, engaged students in classroom discussion of ecology and how economic factors affect the environment.

"We hope to enhance high school teachers' ability to teach biology and ecology using real-world examples of conservation projects run by We Energies and the Zoological Society," said James Mills, the Society's school program coordinator. Added Dr. Dawn St. George, the Society's education director: "The program compares the ecology of temperate and tropical forests and also covers direct and indirect cultural impacts on wildlife – from deforestation to forest fragmentation to climate change."

The fourth part of the program is a contest among students interested in studying in Belize. They will develop essays or graphic presentations explaining conservation topics. The winning scholars will be chosen in April to travel to Belize next August with Scanlan and Malten.

How did We Energies and the Zoological Society link up on this project? "Wisconsin Energy Corp., the parent company of We Energies, provided money to a Belizean conservation organization called Programme for Belize to purchase more than 40,000 acres in Belize. Maintaining a large expanse of forest reduces the carbon dioxide in the air, since plants absorb carbon dioxide," said Matt Malten. "Excess carbon dioxide and other 'greenhouse gases' may disrupt the global climate." Thus, We Energies protected a subtropical forest from being clear-cut. "We've also been able to show the people of Belize ways to manage the forest so they can harvest and sell fruits, wood, medicines and other products that would help sustain their economy."

Kerry Scanlan teaches students how to identify songbirds.

BELIZE & BEYOND

Belize & *Beyond*

The We Energies land is part of the 260,000-acre Rio Bravo Conservation and Management area in northwestern Belize. Rio Bravo is managed by the non-profit Programme for Belize.* The Zoological Society and its conservation partner, the Foundation for Wildlife Conservation, Inc. (FWC), also manage land in Belize called Runaway Creek Nature Preserve.** The 6,134-acre preserve in central Belize is owned by the FWC and is kept as a refuge for wildlife and plants and used for bird research.

Since 1999, We Energies has been taking selected students to Belize in a program it called Belize Bound. We Energies also had produced a conservation curriculum for students in fourth through eighth grades. The Zoological Society offered an education program on birds to middle-school students for several years as part of a larger bird research-conservation-education project called Birds Without Borders-Aves Sin Fronteras℠ (see page 24). The two groups combined forces last year to develop a curriculum guide for high school teachers plus a program of fall field trips and classroom visits, and the Belize trip.

"The reason We Energies is involved in Belize & Beyond is that we want students to understand their individual impact on the environment and our society's impact," says Malten of We Energies. "We want to help them learn how to think critically about developing potential solutions to energy and environmental management."

We Energies and the Zoological Society have agreed to collaborate on the Belize & Beyond project for at least three years. "We look forward to growing the program beyond what it is today," noted Malten. "We like the approach of building a relationship with a few schools at a time."

*For more information about Rio Bravo, go to **www.we-energies.com/environment/gcc_riobravo.htm**

For information about Runaway Creek Nature Preserve and how you can sponsor an acre, go to **www.saveanacre.com or call **(414) 258-2333**. The FWC manages Runaway Creek in conjunction with the Zoological Society. (See page 26.)

At Rufus King High School, Zoological Society instructor Kerry Scanlan (center) ties a cup onto the head of Marissa Baseheart while Lasharay Brown (left) waits for the Cowbird Capers game, which shows students how parasitic birds edge out smaller birds. A blindfolded student then tries to throw popcorn into the cups. The loudest chirping student usually gets the most food, just as a cowbird chick does after hatching in the nest of a smaller songbird.

Matt Malten of We Energies talks with Rufus King High School students about global land management

Underground

With Animals

When winter is bitter cold in Milwaukee, zookeeper Laurie Talakowski stays warm with animals beneath the ground, in the Milwaukee County Zoo's Winter Quarters. It's not the most romantic job. "My job involves lots of shoveling. I spend a lot of time cleaning out stalls," she says. Still, her love for animals makes it all worthwhile. "I want to give them the best care I can. I want them to have comfortable lives."


On the Job: Laurie Talakowski

Part of giving animals good care involves training them to participate in their own health care. Following her through Winter Quarters (underground animal quarters not open to the public), one sees what her job involves. With her hip-length blond hair pulled back in a ponytail, Talakowski walks from stable to stable, checking on camels, zebras, impalas and the rest of the menagerie.

She stops at a stall to do some training with Solomon, a baby eland born last summer. Talakowski holds up a "target stick," what looks like a blue and white Styrofoam drumstick. Solomon comes up to her and puts its nose on it. Talakowski clicks a switch on the target stick and feeds the eland apple chunks. When Solomon hears the click and stands near Talakowski, he knows he will be rewarded with treats. "This is target training," she explains. "We use it to get animals to stay still while we examine them." She moves on down the stalls to a friendly tapir and rubs its long, rubbery nose.

Talakowski's dedication continues beyond her regular zookeeper shift to a volunteer project. Talakowski founded the Wolf Team, a group of zookeepers who volunteer time before or after their shifts to train the Zoo's five timber wolves (see story on page 6). The goal is to get the wolves comfortable enough with certain zookeepers to let the keepers get close enough to do health checks.

Other zookeepers on the Wolf Team say Talakowski is clearly the wolves' favorite. Some of the wolves eagerly approach her when she enters the wolves' yard, but they are more cautious with other team members. The fact that she can rub the fur on Niijii, the wolf most acclimated to humans, is remarkable, says teammate Collette Konkel: "Wolves are not pets. They can be very fearful of humans."

Talakowski's rapport with animals goes back to childhood. The 31-year-old Shorewood native recalls: "I spent summers with my grandmother, who let me keep anything I could catch – turtles, toads, lizards, you name it. We always had dogs, cats and birds." She has three dogs at home now: two American bulldogs named Mira and Fender, and a Chinese crested named Tiki.

An incident at age 4 could have left Talakowski frightened of animals for life. The family German shepherd bit her face. Instead of overreacting, her father took the little girl aside and gently explained why the dog bit her. "I was playing by his food. I shouldn't have been there," she says. Her dad explained that animals will protect their territory, especially their food. That taught Talakowski to expect animals to act in accordance to their nature. People and animals get along well when people respect animals for what they are, she says.

That respect for and interest in animals lead her to study biology at the University of Wisconsin-Milwaukee, where she pursues her bachelor's degree part-time while working as a zookeeper. She also trains dogs in her free time. Whether she's training dogs or wild antelope, her approach is to take time to get to know the animals. It takes time to read their body language; it takes time to develop trust, she says. You might say that she's having the "time" of her life, and Talakowski expects to spend the rest of it working with animals.

By Sandra Whitehead

Update:

Saving Our Songbirds

Blue jays: Some migrate; some stay in Wisconsin.

Baltimore oriole, a migratory bird

The beauty of birds is matched only by their importance to our world. Not only do they eat pesky insects, pollinate plants and disperse seeds, but they also monitor the health of our environment. Remember the canary in the coal mine kept to monitor poisonous gas? Birds can tell us how polluted our section of the Earth has become.

About seven years ago the Zoological Society of Milwaukee and its partner, the Foundation for Wildlife Conservation, Inc. (FWC), launched an international bird project. Called Birds Without Borders-*Aves Sin Fronteras*℠, the project had three goals: **research** to find out why some songbirds are dwindling, **education** to teach the importance of birds, and **conservation** of birds with the help of private landowners. Initiated by Dr. Gil Boese, president of the Zoological Society, the project included bird-study sites, educational activities, and conservation practices on private land and on FWC wildlife preserves both in Wisconsin and the Central American country of Belize.

The project originally was to last only five years, but it has been so successful that it has been extended.

In addition, it has spun off other programs, such as the Belize & Beyond science curriculum for high school students (see page 20). "BWB-ASF research has continued in Belize because there is still so much to be discovered," says Vicki Piaskowski, international coordinator of the project. "For example, we've described the first record of an orange-crowned warbler (a migratory songbird) in Belize."

Among the project's successes, says Piaskowski, are:

- **Counting, banding and examining nearly 14,000 birds** in Belize and Wisconsin as well as monitoring nest sites, determining what songbirds eat and evaluating the types of habitats birds need as migration stopovers where they rest and feed. Bird species included both residents that don't migrate and Neotropical migrants, birds that migrate between North America and Central American countries such as Belize.

- **Adding to science's knowledge of birds:** Since 1997, BWB-ASF staff members have had four articles published in and two others submitted to scientific journals (including one this January in *The Cotinga*), and have given 12 talks at scientific meetings.
- **Educating children about conservation** through bird-science workshops presented to children in grades six through nine in 14 schools in Wisconsin, Michigan and Belize. The Zoological Society's Education Department ran these workshops, which included children doing field observation of birds at study sites near their schools and at the Milwaukee County Zoo.
- **Educating the public by presenting more than 93 bird-conservation talks** and bird-banding demonstrations in Wisconsin and Belize.
- **Providing yearly reports and conservation tips** to the private landowners who have allowed the project to conduct bird research on their land. The reports are available to anyone.
- **Training a cadre of conservationists in Belize:** BWB-ASF staff in Belize have gone on to work for other conservation organizations or to get higher education. Omar Figueroa, our former Belize national coordinator, earned a Fullbright Scholarship in ecology last year and is now in graduate school at the University of Florida at Gainesville.
- **Influencing conservation efforts in Belize and Central America:** "We're training a generation of young people (rangers, teachers, researchers) who are equipped with the skills to influence the future of conservation in Belize." Piaskowski and her staff also have had an impact with presentations made at Central American scientific conferences.

For its bird-research sites in Wisconsin, the project picked distinctively different habitats: a Pewaukee wetland and adjacent deciduous forest, a marsh and restored native grassland near Rosendale in the Horicon Marsh area, and a northern coniferous bog forest near Land O' Lakes. The goal was to determine which sites were best for breeding and which were valuable as migration stopovers. "In Pewaukee we studied birds and the plants, insects and foods that were important during spring and fall migration," says Piaskowski. "This Pewaukee database alone has 289,077 pieces of information, which gives an idea of how data we have collected!"

October 1998 in Pewaukee: Vicki Piaskowski uses a toy bird to show students from West Milwaukee Middle School how gently mist nets capture birds for banding.

A bird is captured in a mist net.

A bird being banded.

A researcher holds up a bird's leg to show the band.

A bird that has been banded is ready for release.

Observers watch an eastern phoebe set for release after banding.

Researchers will spend the next year or so analyzing that data. Among their final reports will be a landowners' manual on how to manage private land as either a migration stopover site or a breeding site for birds. BWB-ASF has identified 22 plant species in Belize that are food for both migrant and resident birds. Seven species of plants are important food for some migratory songbirds that Wisconsin and Belize share, says Piaskowski. "Having this type of practical information is important because landowners can then plant these plants or manage their land so that these plants survive. This will provide food and help bird survival. For the migrants, it may aid in a successful migration north in spring."

Vicki Piaskowski uses binoculars to identify songbirds.

One way to assess the overall value of BWB-ASF to conservation in general and to the survival of songbirds is to consider this, says Piaskowski: "The US Congress appropriates money through the Neotropical Migratory Bird Conservation Act that researchers can apply for. We received a grant of $36,437 for our work in Belize on migratory songbirds and for the training of our Belize staff. It's a very prestigious award because it's extremely competitive.

"Our work on birds in Belize is very important. In North America, most people view migratory songbirds as 'our birds' because they breed here, but these birds spend the majority of their lives in their 'winter' (non-breeding) homes," she says. So it's crucial to find the habitats and plants they use in their winter homes. That way we can develop plans to conserve their habitats to make sure that the birds survive.

By Paula Brookmire

Guam Rails

Male arrived: June 17, 2003
Female Arrived: July 2, 2003
Herb & Nada Mahler Family Aviary

Visitors who spot these shy newcomers to the aviary will see not only two of the world's rarest birds, but also proof of successful efforts to restore a species entirely through captive breeding programs. Extinct in the wild since the 1980s, Guam rails were victims of brown tree snakes. The snakes are an alien species on the island of Guam, probably descended from one pregnant female that arrived at the Pacific island by military aircraft during World War II. These venomous predators wiped out most of Guam's native forest birds. Since 1989, however, 460 rails bred in captivity in American zoos and at a facility on Guam have been reintroduced successfully to the wild on the nearby snake-free island of Rota. Despite the toll taken by typhoons and adjustment to the wild, an estimated 250 to 300 rails have survived (one of them is shown in the inset photo below). The program will receive any chicks resulting from what keepers hope to be a successful mating here. The Zoo's male was hatched at the Sedgwick County Zoo in Wichita, Kan., and the female hatched on Guam. The pair are in their own exhibit, across from the rhinoceros hornbills at the aviary's west entrance. Both male and female have the same plumage (see bird walking on stones). Rails are very secretive and often are found on the ground, darting through dense ground cover.

◀ Photo from Guam Rail SSP and Guam biologist Suzanne Medina

Sora Rails

Injured bird back on exhibit: July 2003
Herb & Nada Mahler Family Aviary

Two smaller American relatives of Guam rails (see story at left) have homes in separate exhibits at the eastern end of the Zoo's aviary. One sora rail used to live in the Guam exhibit with the Guam kingfisher. "The male Guam kingfisher attacked him, and he had to recover," says Bird Curator Kim Smith. The bird was put into the Jewels of the Tropics exhibit at the aviary's eastern entrance. He often settles for hours in an artificial nest a foot from the viewing glass to the right as you face the exhibit. This is a very visible spot for the usually hidden rail. Robin-sized sora rails are so secretive that seeing one in the wild involves hours of patiently slogging through Wisconsin wetlands during the height of mosquito season. The Zoo's other sora rail lives up to its hard-to-see reputation. It's in the eastern free flight area, where you can walk through with birds flying overhead. You may spot the sora occasionally along the walkway, but, like its wild cousins, it's more often heard than seen. Listen for a brief descending whinny. If you have Internet access, you can hear a recording of rail calls on the University of Michigan Animal Diversity Web site at **www.animaldiversity.ummz.umich.edu/**. Both of our sora rails suffered wing injuries in the wild, preventing them from migrating south in December 2001. After being declared unfit for release by the Wisconsin Humane Society, they came to the Zoo.

Reticulated Giraffe

Born: October 31, 2003
Giraffe Building

Great galloping giants, the surprises life holds for a zookeeper! When Rich Schweitzer arrived at the Zoo's Giraffe Building early Halloween morning, the stall occupied by the herd's 19-year-old matriarch Malindi also held a 5-foot-7-inch, 112-pound mystery – a newborn male calf. Since Malindi had been fed birth-control pellets and the Zoo's only adult male, Kio, had died in August 2002, Schweitzer was more than a little astonished. No one knew she was pregnant. However, a giraffe's gestation period is 15 months, and the pellets are not 100% effective. The calf was named Mark, after Schweitzer's son who died in a car accident years ago. Mark the giraffe was a bit small, Schweitzer said, since giraffe calves usually are 6 feet tall and about 150 pounds. Giraffes are the world's tallest animals. Mark was gaining weight at the rate of 2 pounds a day in November. Quick to demonstrate a healthy interest in his surroundings, the calf moves with that floating gait unique to giraffe calves, whose hooves hardly seem to touch the ground. Malindi (shown here with Mark), who has borne seven calves, is an excellent mother. Giraffe mothers here have a history of surprising behavior. Rahna, 11 (the natural blond with pale markings), delivered her last calf, Skye, on camera to the astonished delight of visitors July 14, 1998. Skye and Gudren, a 1998 calf of Malindi's, now live at the Sacramento (Calif.) Zoo.

Matschie's Tree Kangaroo

Born: Around February 22, 2003
First public appearance:
August 5, 2003
Australia Building

Peering shyly over its mother's shoulder, clinging to her back or balancing delicately on a tree branch, the youngest resident of the Australia Building usually begins its daily activities sometime in the mid-afternoon. The joey, which plunges back into Mom's pouch every time keepers try to determine its sex, is the second offspring of mother Kiama and father Ren. Keepers estimate that the baby was born in February based on its pinkie-sized presence in the pouch that was confirmed March 4. Five months later, its head, arm and plush blond tail could be seen during the day. Matschie's tree kangaroos often wait for 300 days before venturing out of the pouch and don't leave permanently for 350 days. That's a longer pouch life than most of their near relatives. For example, red kangaroos such as Nicky (featured in the fall 2003 issue of *Alive*) are out of the pocket for good in about 235 days. In the wild, Matschie's tree kangaroos are found only on the Huon Peninsula of Papua New Guinea and the nearby island of Umboi. Since more than 50% of the wild population has disappeared in the last 10 years, each birth in the large captive population is good news for the species.

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Expand EdZOOcation!

Help Us Construct a New Education Building

The Karen Peck Katz Conservation Education Center will be a new, state-of-the-art facility.

Help us RAISE our grade by:

- ★ Adding 5 more classrooms with a new building
- ★ Offering easy bus & car drop-off & pick-up
- ★ Expanding special-needs programs
- ★ Introducing online registration
- ★ Adding global conservation programs
- ★ Increasing school programs in low-income neighborhoods

Our lead gift allows us to begin construction.

Your gift helps us complete it.

See the donation form enclosed with this *Alive* package, call (414) 258-2333, or go online at www.zoosociety.org.