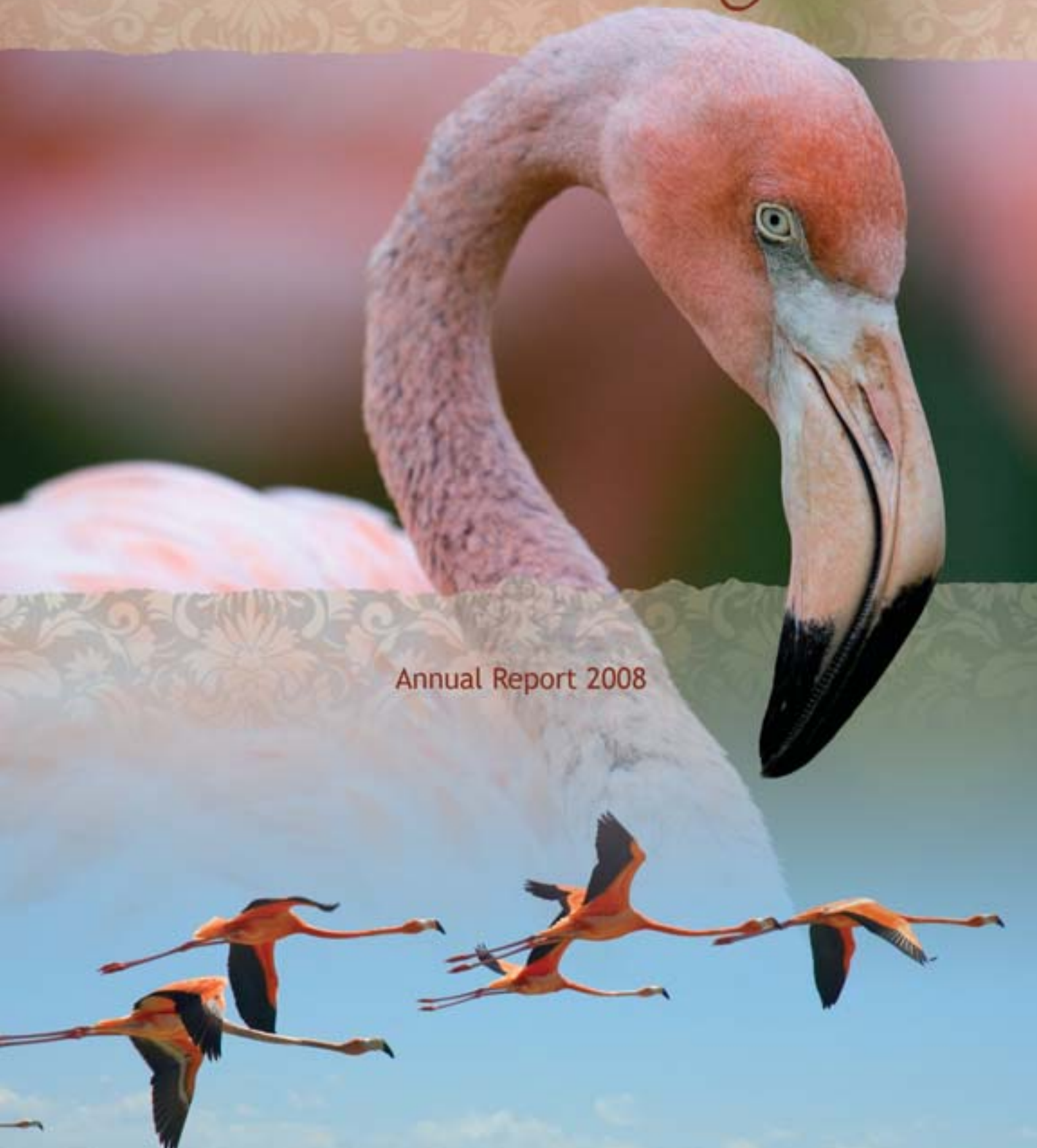


Milwaukee County Zoo

Annual Report 2008



Milwaukee County Zoo

2008 Annual Report

Vision

The Milwaukee County Zoo will be a zoo of renown with a reputation as a leader in animal management, conservation, research and education within a wholesome recreational environment enjoying the admiration of the citizens of Milwaukee County as well as all zoo guests and other zoos of the world.

Mission Statement

The Milwaukee County Zoo will inspire public understanding, support and participation in global conservation of animal species and their environment by creating a unifying bond between our visitors and the living earth and provide an environment for personal renewal and enjoyment for our guests by:

- Contributing to world wide animal management, conservation and research efforts;
- Fostering sound physical, psychological and social development for the animal groups in our care;
- Sharing our knowledge with the intent to reinforce the human-animal-earth bond;
- Improving the quality of our professional development, administration and operating environment;
- Striving for the financial self-sufficiency of the organization;
- Continuing the public-private partnership with the Zoological Society of Milwaukee County.

Table of Contents

1	Address from the County Executive
2	Letter from the Director
3	Milwaukee County Zoo History
6	Special Exhibits
7	Animal Management and Health Division
21	Administration and Finance
23	Public Affairs and Services
26	Operations
28	Operating Expenses
31	The Milwaukee County Zoo and the Zoological Society
33	County Executive and Board of Directors



Dear Friends,

For the Milwaukee County Zoo, the year 2008 featured several high profile additions and renovations, whether related to the animal collection or the special exhibit schedule, these again positioned the institution as one of the finest zoological attractions in the Midwest.

The year's major highlight was the Association of Zoos and Aquariums (AZA) annual conference hosted by the Zoo, held September 14-18 at the Midwest Airlines Center. In addition to many workshops and general programming, the week's events culminated in "Zoo Day," with delegates from across the country enjoying our Zoo offerings, including special behind-the-scenes tours presented by all Divisions of the Zoo. In addition, the Zoo received accreditation during the conference, meeting the operation standards set forth by AZA.

As a kickoff to summer, the Zoo opened a renovated and much anticipated animal exhibit in the Idabel Wilmot Borchert Flamingo Exhibit and Overlook. Featuring a striking flock of Caribbean flamingos, the exhibit allows these popular birds to roam the grassland and enjoy the pond near the Aviary. A climate controlled building with state of the art amenities ensure the birds are safely sheltered during our harsh Wisconsin winters.

The opening of the U.S. Bank Gathering Place in May marked the final project in the Zoo's eight-year capital campaign schedule. The new light-filled atrium entrance features a central, comfortable meeting space for visitors, complete with an upscale coffee shop and renovated gift shop and Flamingo Café restaurant.

The summer of 2008 marked the return engagement of a live sting ray and shark exhibit (also displayed in 2005 and 2007), Sting Ray & Shark Reef, sponsored by Sundance Vacations. Visitors could literally get "in touch" with the animals – feeding and interacting with several different species.

Initial discussions began for the construction of a new Hippo Exhibit that will feature a large, glassed-in aquarium and extra space to house three adult hippos and several youngsters.

I again thank the staff for their continued support of the institution. Your dedication and efforts result in an outstanding zoological park, attracting visitors from Milwaukee County and beyond.

I would also like to recognize the continuing relationship between the Zoo and the Zoological Society of Milwaukee (ZSM). This public-private partnership helps foster many of the Zoo's capital projects undertaken annually.

A handwritten signature in black ink, appearing to read "Scott Walker".

Scott Walker
Milwaukee County Executive

A large, close-up photograph of an orangutan's face, looking directly at the camera. The image is tinted with a reddish-orange color. The orangutan is sitting in a bed of straw or hay.

Orangutan, Mahal

Letter from the Director

September 2009



During the course of 2008, we were honored to host the AZA national conference (Sept. 14-18), welcoming more than 1,600 zoo and aquarium professionals to Milwaukee, and to our Zoo. The week's events offered committee meetings, workshops, general programming, poster sessions, accreditation hearings and more than 200 commercial members as part of the exhibition showcase. We offered participants a full day at the Zoo, complete with a picnic lunch, behind-the-scenes tours and an evening reception. Also of significance, after a thorough investigation prior to the conference, the Zoo was granted accreditation by the AZA's independent Accreditation Commission. I thank the entire Zoo and Society staff and the Zoo Pride volunteers for their efforts and hard work to realize both of these successes.

In May, we welcomed a flock of Caribbean flamingos (last displayed in 2001) to the Idabel Wilmot Borchert Flamingo Exhibit and Overlook. Situated between the Animal Health Center and the Herb & Nada Family Aviary, the exhibit allows the birds to roam a lush yard complete with a pond and benches for easy viewing. Although not accessible to the public, the flamingo building (approximately 4,000-square-feet) comfortably accommodates the flock during the winter months.

Also in May, the Zoo's new front entrance mall, the U.S. Bank Gathering Place was unveiled to the public. The design allow for a glass atrium, Zoo displays and educational and meeting spaces for groups. This new building connects a renovated main restaurant and two gift shops into one seamless "gathering place" for guests.

Our summer exhibit displayed Sting Ray & Shark Reef, sponsored by Sundance Vacations. In welcoming back this extremely popular exhibit, we added a new species with the addition of the bamboo shark. All of these aquatic species were featured in large touch pools for visitors to get an up-close encounter. Attracting approximately 280,000 visitors, the exhibit continued to be immensely popular.

Regarding the animal collection, we were grateful to receive a generous donation to begin design and construction for a new Hippo Exhibit. The new exhibit will allow us to house three adult animals and their offspring in an area featuring a large, glassed-in aquarium that will allow visitors to watch the animals swim from just inches away.

In February, our Zoo was excited to add an exceptional infant male orangutan named Mahal to the collection. Rejected by his mother at the Cheyenne Mountain Zoo, Mahal was to be placed with a possible surrogate mother, our resident female orangutan, MJ. The pairing exceeded our expectations in that these two animals bonded within a few days, and today retain an intense mother/child relationship. (Further details on Mahal and MJ are included in this year's report.)

We once again extend a thank you to the County Executive, the County Board and the Zoological Society and their partners for their continued support. A number of our capital projects, renovations and special exhibits are possible because of their dedicated efforts. Please read on as each Division shares highlights from the year.

Charles Wikenhauser
Director

Our history at a glance

The Milwaukee County Zoo | Home to more than 2,200 mammals, birds, fish, amphibians and reptiles, we are proud our zoological park continues to be recognized as one of the finest in the country.

- 1892** The Milwaukee County Zoo (MCZ) started as a miniature mammal and bird display in Milwaukee's downtown Washington Park
- 1890s** The Zoological Society was founded, lending financial support to the Zoo
Society helps promote MCZ by capital fundraising campaigns for building renovations and new exhibits.
- 1902** MCZ expanded to 23 acres; now home to 800 animals
- 1934** MCZ became an entity of the Milwaukee County Park Commission, which helped provide resources to expand the Zoo
- 1958** MCZ moved to its present location on 200 acres of park land
- 1960s** Completion of: the Primate Building, Monkey Island, Winter Quarters, Polar and Brown Bear Dens and the Feline, Pachyderm, Giraffe, Bird, Small Mammal, Aquarium & Reptile and Australian Buildings
- 1970s** MCZ added the Children's Zoo, Train Shed and Zoo Hospital, the Dall Sheep Exhibit, the Gift Shop and Zoo Pride also were established
- 1980s** Initiated MCZ Master Plan
Completion of: Wolf Woods, underwater viewing in the Polar Bear and Sea Lion Exhibits, Oceans of Fun, the Dairy Complex, Humboldt Penguins and the Peck Welcome Center
- 1990s** An extensive renovation of the Aviary and the construction of the new Apes of Africa and the renovation of the Primates of the World
- 1995** Renovation of the Aquarium & Reptile Center; renamed the Aquatic & Reptile Center
- 1998** Remodeling of the Small Mammals Building
- 1999** Initiated a \$28 million capital improvement plan; represents a significant partnership venture between the Zoo, Milwaukee County and the Zoological Society
- 2002** Renovation and modernization of Lakeview Place restaurant
Redesign of the Ice Cream Palace and Karibu Gift Shop
Groundbreaking for the new Animal Health Center
Major renovation (both indoor and outdoor quarters) to our landmark exhibit, Monkey Island; renamed Macaque Island
- 2003** Completion of Animal Health Center
Initiated design phase of renovation to the Feline Building; animals relocated
Began initial renovations to the Stackner Heritage Farm and construction of the Karen Peck Katz Conservation Education Center
- 2004** Completion of the Karen Peck Katz Conservation Education Center
Began demolition and finalized designs for Northwestern Mutual Family Farm
Continued construction of the new \$7.2 million Florence Mila Borchert Big Cat Country
- 2005** Completion of the Florence Mila Borchert Big Cat Country
Completion of the Northwestern Mutual Family Farm
Completion of the redesign and renovation of the Safari Train Station
Began initial design and renovation phase of the Giraffe Exhibit; groundbreaking occurred summer of 2005
- 2006** Completion of the Miller Brewing Company Giraffe Experience
Began initial design phase of new U.S. Bank Gathering Place; on schedule to open in 2008
Began design of a new Flamingo Exhibit
- 2007** Began construction for the new U.S. Bank Gathering Place; opening in 2008
Broke ground and began construction of the Idabel Wilmot Flamingo Exhibit and Overlook; opening in 2008
- 2008** Completion of the U.S. Bank Gathering Place
Completion of the Idabel Wilmot Borchert Flamingo Exhibit and Overlook
Began conceptual design for new Hippo Exhibit and service areas
Received accreditation by the AZA's independent Accreditation Commission; hosted 2008 Annual Conference

2008 Highlights

The major highlights of 2008 were the completion of both the U.S. Bank Gathering Place and the Idabel Wilmot Borchert Flamingo Exhibit and Overlook. Other notable events for the year included: the initial design phase for a new Hippo Exhibit; accreditation by the Association of Zoos and Aquariums and hosting the annual conference; the addition of an infant orangutan to our animal collection. Listed here are highlights and accomplishments in greater detail:

U.S. Bank Gathering Place

The U.S. Bank Gathering Place, a complete renovation of the Zoo's front entrance mall, opened in May, and features a visitor-friendly atmosphere, complete with a light filled atrium entrance, an expanded and renovated restaurant and gift shop, an upscale coffee shop/snack bar, new restrooms, a Zoo/Zoological Society Guest Services area, electronic informational screens displaying Zoo activities and conservation efforts and a photo gallery showcasing the Zoo's animal collection.

The 29,500-square-foot atrium has a fluid feel, as it connects the formerly separate offices of the Zoo and the Zoological Society. The upgraded dining area features food stations offering everything from burgers and pasta to sandwiches. A salad and fruit station offers visitors a healthy option as well.

The project was made possible by a donation from U.S. Bank, the Milwaukee County Zoo, Milwaukee County and the Zoological Society.

Idabel Wilmot Borchert Flamingo Exhibit and Overlook

Also in May, the Zoo became even prettier as a flock of Caribbean flamingos took up permanent residence with this Flamingo Exhibit located between the Animal Health Center and the Herb & Nada Mahler Family Aviary. Exhibit features include a lush yard and pond, along with walking paths and benches for easy viewing of these striking birds.

Inside their wintering building (not open to the public), the birds enjoy fresh air circulated by air vents and filters, indoor wading pools and resilient flooring that's easy on their feet. A spacious kitchen area for preparing the birds' food and extra space for housing other birds, such as penguins, make it easier for keepers to care for the collection. The building's outdoor porch, enclosed with a predator-proof mesh, allows the flamingos to venture out at night.

For visitors, the exhibit features close-up views and new, colorful graphics complete with fun facts about the birds. Eventually, an observation deck will be built overlooking the pond to give guests an even better vantage point of the flock.

Flamingos are more likely to breed in large flocks; so the Zoo plans to bring in additional birds in the future.

New Hippo Exhibit

Also in 2008, the Zoo received a generous donation to begin the initial design phase for a new Hippo Exhibit. Robert Dohmen, president of the Dohmen Family Foundation, provided initial funding to the Zoological Society of Milwaukee and the Milwaukee County Zoo for exhibit design and the endowment to maintain the exhibit after completion.

New design components for the exhibit include a large, glassed-in aquarium that will allow guests to watch these amazing animals swim from only inches away. Extra space lets the Zoo house three adult animals, and several youngsters (the current Hippo Exhibit includes an outdoor yard, a pond and two hippos). Interactive signs with information on these threatened animals will provide an educational component. Once complete, the exhibit will be one of about 10 underwater viewing Hippo Exhibits in the country.



U.S. Bank Gathering Place

Association of Zoos and Aquariums (AZA) Accreditation and Annual Conference

As previously mentioned, in September the Zoo was proud to receive accreditation by AZA's independent Accreditation Commission. To receive accreditation, the Zoo underwent a rigorous investigation to ensure it has and will continue to meet advancing standards, which include animal care, veterinary programs, conservation, education and safety.

As AZA President and CEO Jim Maddy stated, "The Milwaukee County Zoo was granted AZA accreditation because it meets high standards in every aspect of its operations. Milwaukee should be proud to have one of the top zoos in North America as a valuable community asset."

The Association requires zoos and aquariums to successfully complete the accreditation process in order to become members of the organization – and to resubmit to this process every five years. It accredits only those institutions that have achieved rigorous standards of animal care, education, wildlife conservation and science. Less than 10 percent of licensed animal exhibitors in the country meet these unparalleled standards.

For accreditation, the Zoo supplied detailed documentation of operations, underwent an examination by the visiting team of the facilities, staff, and operations, and an interview by the AZA Accreditation Committee.

During this same time period, our Zoo was honored to host more than 1,600 animal experts from around the world, for AZA's 84th Annual Conference. No small undertaking, the conference not only offered a large number of programs, discussions and outings, but also showcased our extraordinary Zoo and city.

Conference programs, which included topics like climate change education, and progress in elephant care, took place at the Midwest Airlines Center, and opening reception activities were held at the Milwaukee Public Museum. Zoo staff participated in many of the scientific and program sessions, and presented seven technical posters on studies and research at our Zoo.

Nigel Marvin, a British television producer and wildlife presenter, was the keynote speaker, and Jack Hanna, world-renowned wildlife conservationist and Director Emeritus of the Columbus Zoo, received the R. Marlin Perkins Award for Professional Excellence, AZA's highest honor.

For Zoo staff, the highlight of the conference was "Zoo Day," in which delegates were invited to enjoy our park, and take part in behind-the-scenes tours including every area from the Animal Health Center to the Group Sales Department. A special picnic lunch was served for the delegates, along with an evening hors d'oeuvre reception. The entire conference was deemed a huge success and accomplishment, thanks to Zoo and Society staff and Zoo pride volunteers.



Jack Hanna



Zoo Director
Charles Wikenhauser



Other Highlights

In 2008, the Public Policy Forum conducted a survey asking Milwaukee County residents to rate various County services and organizations on a five-point scale, with five indicating an "extremely good" rating. The Milwaukee County Zoo received a ranking of 4.4, the highest of any County Department. The report is entitled Citizens Views of Government Structure in Milwaukee County – Survey of Milwaukee County Residents.

The Zoo continued to host temporary exhibits and special events throughout 2008. Major highlights of the summer included our summer exhibit, Sting Ray & Shark Reef sponsored by Sundance Vacations, and the opening of the Idabel Wilmot Borchert Flamingo Exhibit and Overlook. During the height of the Zoo's high season, these offerings attracted and delighted large crowds of visitors.

The special event and attraction lineup included: MillerCoor's Oceans of Fun Seal and Sea Lion Show, Penzeys Spices' Carousel, National City's Zoomobile (25-minute guided motor vehicle tours), Samson Stomp & Romp sponsored by Gatorade and Pick 'n Save, Sunset Zoofari sponsored by Tri City National Bank and Breakfast and Lunch with Santa sponsored by Racine Danish Kringle, to mention a few.

2008 Special Exhibit

Sting Ray & Shark Reef

Sponsored by Sundance Vacations

The exhibit that made a splash at the Zoo in the past was back for a return engagement, as Sting Ray & Shark Reef, sponsored by Sundance Vacations, was displayed in the Otto Borchert Family Special Exhibits Building. The exhibit was featured May 24 through September 7, and on remaining weekends throughout September.

As visitors ventured into the tropical environment, they followed the sounds of splashing water, coming upon the exhibit's 6,000-gallon pool featuring two species of non-aggressive sharks. Both bamboo (new to the exhibit) and nurse sharks were on display for visitors to touch and feed.

As guests moved through the display, they encountered an even larger touch pool, of 11,000 gallons, and featured the cownose and the southern red sting ray – floating like flying carpets through the water. Visitors also were invited to dip their hands into the warm water to touch and feed these amazing animals. Most closely related to their shark exhibit neighbors, sting rays are generally found swimming, or partially buried in the sand, in the shallow coastal waters of temperate oceans across the globe.

The only exhibit of its kind in Wisconsin, Sting Ray & Shark Reef offered visitors the opportunity to touch and feed these unusual marine mammals without ever leaving the state! The display again proved to be extremely popular with kids and adults alike.

This summer exhibition was made possible with support from Sundance Vacations, the Milwaukee County Zoo and the Zoological Society. Exhibit cost was \$2 per person after regular Zoo admission. Food for the animals was offered at an additional cost.



Cownose Sting Ray

2008 Animal Management and Health Division

Overview The year 2008 included changes and additions to our existing animal collection, the continuation and expansion of our conservation and research initiatives and major renovations and upgrades of animal facilities.

Animal Division

Collections

Our Zoo is a proud accredited member of the Association of Zoos and Aquariums, the premiere association of zoological institutions in North America with unequal standards for animal care and management. Many of the transfers and the breeding of animals described below are in accordance with AZA programs including Species Survival Plans® (SSPs), Taxon Advisory Groups (TAGs), and Population Management Programs (PMPs).

The Animal Division Collections serve to enhance visitors' knowledge and appreciation of animals, and to contribute to animal species conservation. Our front-line animal care staff devotes more than 100,000 hours each year toward the care of our animals.

With such a large and diverse animal collection, there are a significant number of births, transfers and deaths every year. In general, due to the level of husbandry and veterinary care, the life expectancy of animals at our Zoo may greatly exceed the life expectancy of animals in the wild. These life expectancies vary dramatically with the species – small rodents are old after one or two years, while swans can live for decades. Female lions are ancient when 20 years of age, but our Amazon River tortoise may be 100 years old. Animals also are subject to the same types of health conditions as humans, and these may result in earlier deaths.

The animal staff devotes much thought and time toward enriching the lives of the Zoo animals. They provide mental and physical stimulation to the animals by varying their social structure, mixing compatible species together, varying their habitats, offering interesting scents, providing manipulation devices, engaging them in positive reinforcement training, offering food treats for foraging opportunities and supplying toys and problem-solving reward devices. This year, the enrichment programs were revised to document and schedule the enrichment items, and determine which techniques were most successful.

On December 31, 2008, the Milwaukee County Zoo animal collection on Zoo grounds included more than 2,200 animals representing 321 species, as listed below:

On Zoo Grounds	Species	Specimens
Mammals	80	482
Birds	68	309
Reptiles	48	134
Amphibians	11	25
Fish	94	702
Invertebrates	20	582
TOTAL	321	2,234

The animal collection owned by our Zoo and out on loan to other zoological institutions included 68 animals representing 37 species, as listed below:

Out on Loan	Species	Specimens
Mammals	19	36
Birds	11	18
Reptiles	7	14
Amphibians	-	-
Fish	-	-
Invertebrates	-	-
TOTAL	37	68

Aquatic and Reptile Center

During 2008, the Anaconda and Grand Cayman Blue Iguana Exhibits underwent extensive renovation. The anaconda now resides in a shallow pool more typical of its preferred habitat. Likewise, the blue iguana has an exhibit specially designed to look like its island home. Additional lighting features also help to raise the temperature of its enclosure to temperatures typical of the warm Caribbean.

Long-term conservation programs for rock iguanas, ornate box turtles, timber rattlesnakes, Butler's garter snake, and Caribbean frogs continued and expanded. Spawning techniques were developed for native topminnows including the Wisconsin endangered starhead topminnow. Captive reproduction of these fishes may be necessary to prevent their extinction should they prove to be susceptible to Viral Hemorrhagic Septicemia (VHS).



Timber Rattlesnake

One of the most popular exhibits at the Zoo is the African Great Lakes Exhibit. This display features hundreds of colorful cichlids, dazzling to the eye. Each of the African lakes holds hundreds of closely related species even though one of the lakes, Lake Victoria, is only 14,000 years old. How did this come to be? Previous studies had indicated that females search out the most colorful males, so female choice drives evolution. However, studies conducted in the ARC in 2007 and 2008 found that males also respond to both color and pattern differences in other males. This means that both sexes are involved in the development of these colorful "species flocks." One of these studies was published in one of the most prestigious biology journals in the world, "Biology Letters." These studies were collaborative efforts with the Medical College of Wisconsin and the University of Wisconsin-Milwaukee.

Because of the knowledge and insight gained from five years of fieldwork with Caribbean frog species, the Aquarium and Reptile Curator was invited to participate in the First National Congress for the Preservation of Aruba Wildlife. The purpose of this Congress was to develop a comprehensive plan for the management of all of Aruba's wildlife in both terrestrial and marine ecosystems. It is believed that Aruba is the first country in the world to develop such a plan. Additionally, he gave a presentation about the effects of hurricanes on Caribbean frogs at the 8th Latin American Congress of Herpetology where 500 leading herpetologists from Latin America and the Caribbean were in attendance.



Aviary

The Aviary has continued its long tradition of involvement with AZA programs at both the Species Survival Plan level and the Population Management levels. The Species Survival Plan species such as Congo peafowl, whooping crane, Humboldt penguin, Waldrapp ibis, Micronesian kingfisher, Madagascar teal were either moved in or out of the Zoo, or bred here to help increase population numbers of these critically endangered animals. We also established another potential breeding pair of the critically endangered Micronesian kingfisher in the hopes of attaining offspring from the oldest living member of this species in the world.

Other notable breeding successes include red-billed hornbill, blue-crowned motmot, white-bellied stork, crested screamer, hooded merganser, Nicobar pigeon, and green aracari.

The Zoo officially opened the Idabel Wilmot Borchert Flamingo Exhibit and Overlook in May. Caribbean flamingos raised in San Antonio, Texas, were brought to their new home in early spring. The plan for the exhibit is to import more flamingos, as well as raise some from eggs in 2009.

The Aviary supported in situ conservation efforts again in 2008, sending a zookeeper to Michigan to aid in the Great Lakes Piping Plover Recovery Program. The Zoo has participated in this program since 1996.

Large Mammals

The Large Mammal Sections of the Zoo include: Big Cat Country, North America/Australia, Pachyderms/Giraffe, and Africa/South America Hoofstock/Camel areas. In all of these areas, the staff continued to manage an extensive animal training program using positive reinforcement so the animals willingly volunteer to participate in animal care procedures, health exams and sample collections. The program enhances the animals' care and quality of life. The biological samples collected in stress-free conditions serve as a basis for reproductive, veterinary and husbandry research programs.



Red-billed Hornbill



Finnegan the Moose

North America/Australia

New births in 2008 included a male reindeer, Edan, born in June. After a shaky start and separation from the herd for several months due to health issues, Edan was successfully reintroduced and continues to do well. In September, we received a young male moose, Finnegan, from the Northeast Wisconsin Zoo in Green Bay to be a companion for and successor to our older male, Clifford. The two were successfully introduced to each other in December and get along quite well together.

Unfortunately, we also had animal losses during the year. The brief description here cannot adequately convey the tremendous efforts of the animal care and veterinary staff that were required to care for these animals, some of whom have been with us their entire lives. We said goodbye to several longtime residents at the Zoo: Chimay, our 11-year-old American elk, died in September two days after having a stillborn calf delivered via Caesarian section; one month later, we lost Dolly, a 13-year-old Dall's sheep, due to deteriorating health issues.

Big Cat Country

After several years of effort, and a veritable mountain of paperwork, the Zoo welcomed a jaguar named "Pat the Cat" from the Belize Zoo's Jaguar Rescue Center. As farmers encroach on jaguar habitat, jaguars may start killing domestic livestock and farmers might kill the jaguars to protect their livelihood. The rescue center in Belize accepts these "problem" jaguars, acclimates them to people, and finds appropriate homes for the animals. Because Pat came from the wild, and is unrelated to any captive jaguar lines, he'll add much needed genetic diversity to the captive jaguar population in U.S. zoos. Funding from generous donors allowed the Zoo to modify Pat's den and outdoor exhibit to safely accommodate his preference to perch in trees.



Sasha the Lioness

In February 2008 our tigers, Amba and Bachuta, were introduced to each other for the first time, which will hopefully result in offspring.

The staff mourned the loss of the longtime resident of the Zoo, the lioness Sasha. Sasha died on Christmas Eve at an age of 23 years. According to our records, she was the longest-lived lioness in the history of Milwaukee County Zoo.

The staff of the Zoo's Big Cat Country participated in a study of cheetah mate selection by collecting urine samples from our male cheetahs. The St. Louis Zoo conducted this study.

One of the Zoo's snow leopards, Tomiris, has always been a very nervous and reclusive animal. However, since the initiation of an operant conditioning program using positive reinforcement, Tomiris is now much more at ease with the keeper staff. Our next task is to successfully introduce her to our male snow leopard.

Pachyderms/Giraffe

In preparation for the next master planning phase at the Zoo, we've been gathering information regarding the construction of new elephant exhibits. The Zoo collaborated with the Milwaukee School of Engineering

to have three competing senior-student teams design a new Zoo elephant facility. Many unique and useful design ideas resulted from this competition.

Conceptual plans for a proposed underwater viewing Hippo Exhibit and expanded hippo facilities was completed, and more detailed planning for these proposed projects will continue in 2009.

Our 8-year-old male bongo unexpectedly died at the end of the year. We will postpone bringing in a new bongo since the proposed new Hippo Exhibit may encompass the Bongo Exhibit. Two animals joined the Pachyderm collection this year: a 19-year-old female Malayan tapir, and an 11-year-old male warthog. We're seeking mates for both of them.

Our female black rhinoceros was successfully introduced to the male on several occasions this year, but no pregnancies resulted. The Pachyderm staff has been collecting samples to monitor her hormone levels in preparation for a complete reproductive examination.

Positive reinforcement training for all of the animals at Pachyderms continues to progress. For example, the female Asian black bear is being trained to offer her paws for nail trimming. The male warthog is being trained to walk into a transfer crate and to accept medical injections. The hippos are being trained to present their mouths and hold still for tooth trims. The elephants have been trained to present their ears to allow blood sampling. All of this is done voluntarily by the animals in exchange for praise and treats.

Africa/South America Hoofstock/Camels

A number of animal transactions took place in 2008. Two impala were born – a male in June and a female in December. A female greater kudu was born in February. A female Bactrian camel was born in May but unfortunately had congenital defects that led to her death. A Baird's tapir was also born in May. Three animals were shipped out from this area in 2008: the male impala born this year went to Metro Richmond Zoo in Virginia to be introduced to a group of females for breeding; a 4-year-old female Damara zebra went to a zoo in North Dakota; and our young male Bactrian camel went to a zoo in Canada.

Primates of the World and Apes of Africa

The Milwaukee County Zoo is home to one of the largest collections of bonobos, or pygmy chimpanzees, in captivity. During 2008, several of our bonobos were transferred to other zoos. A nine-year-old female, Anna Neema, and her two offspring went to the Columbus Zoo in Ohio on a breeding loan. (We had received a young female, Tamia, from the Columbus Zoo in 2007.) Another nine-year-old female, Zanga Mokila, who was born here on loan from the San Diego Zoo in California, was transferred to the Cincinnati Zoo in Ohio. These moves will assist in maintaining the optimum genetic diversity within the North American population.

The captive management program of bonobos at our Zoo has greatly assisted in raising the standard for bonobo husbandry, not only in North America, but in Europe as well. Our ability to obtain medical information voluntarily from the bonobos, including cardiac and fetal ultrasounds, has increased the health and welfare of the bonobo individuals and provided valuable information to the scientific community.

Our orangutan collection changed with the addition of a ten-month-old male, Mahal, in February. Mahal came to us from the Cheyenne Mountain Zoo in Colorado Springs, Colorado, where his inexperienced mother was unable to care for him. The Orangutan SSP recommended that MJ, our female in on loan from the Toledo Zoo, serve as a surrogate mother for Mahal. The introduction went very well and very quickly. Not too long after that, Tom, our adult male, joined MJ and Mahal without any problems. Mahal became an instant celebrity in the Milwaukee area and thus continues to assist us in educating our visitors about orangutans and their dire situation in the wild.

New arrivals included the births of two Goeldi's monkeys in our center exhibit. Their arrivals increased the activity level and public interest in this exhibit. And with only two days left in the year, we received a male mandrill from the Pittsburgh Zoo per Mandrill SSP recommendations. We will pair this male with our female in the spring of 2009 after we send our current male to the Jacksonville Zoo for breeding with their two females.

Unfortunately, 2008 also brought three significant deaths to our primate collection, and these include: a 29-year-old female Colobus monkey, a 26-year-old male Diana monkey, and a 17-year-old male Japanese macaque. We take some consolation in knowing they all lived long, healthy lives.



Mahal



Baird's Tapir

Small Mammals

The year 2008 brought some very welcome additions to the Small Mammal Building's collection, and these included: four male meerkats, a very popular species, in on loan from the Apple Valley Zoo in Minneapolis; a female dwarf mongoose from the Brookfield Zoo in Illinois to be a companion for our lone male; and a female cotton-top tamarin from the Albuquerque Biological Park in New Mexico for breeding with our male in accordance with the Cotton-top Tamarin SSP.

Our straw-colored fruit bat colony had a net decline of about 10% for the first time in several years. Since the colony had grown to maximum size for our facilities, we instituted a program of vasectomizing our males to curtail further breeding. We continue to search for new homes at other zoos for some of our bats. Our total straw-colored fruit bat population is nearly 150 bats, including individuals in the colony, geriatric individuals and hand-raised individuals, used for educational purposes.

In the Small Mammal Building we lost some long-term residents and favorites. These include a 17-year-old owl monkey, a 16-year-old springhaas, a 13-year-old chevrotain and a 12-year-old pygmy marmoset, all with age-related conditions. We also had two individuals who weren't quite as old, but had serious health issues. The first was an 11-year-old black and white ruffed lemur with renal failure and an 8-year-old meerkat with an ovarian tumor. Our last significant loss was a female three-banded armadillo. She came to us with her mate in 2007 from the Lincoln Park Zoo in Chicago. Both individuals in this pair were wild-caught and their ages unknown. Fortunately they successfully produced a male offspring before the female died.

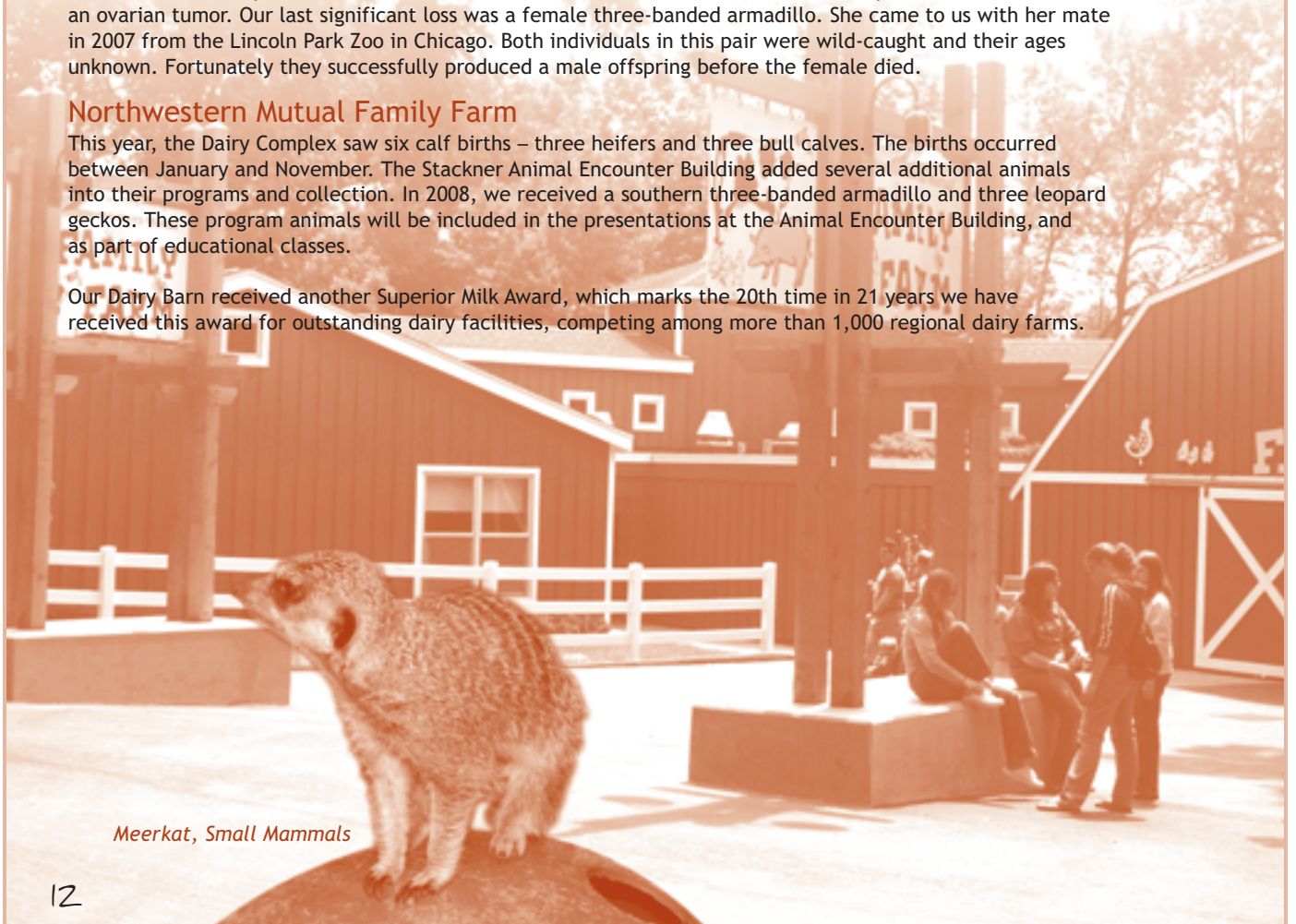
Northwestern Mutual Family Farm

This year, the Dairy Complex saw six calf births – three heifers and three bull calves. The births occurred between January and November. The Stackner Animal Encounter Building added several additional animals into their programs and collection. In 2008, we received a southern three-banded armadillo and three leopard geckos. These program animals will be included in the presentations at the Animal Encounter Building, and as part of educational classes.

Our Dairy Barn received another Superior Milk Award, which marks the 20th time in 21 years we have received this award for outstanding dairy facilities, competing among more than 1,000 regional dairy farms.



*Northwestern Mutual Family Farm;
Kohl's Cares for Kids Play Area*



Meerkat, Small Mammals

Animal Health Programs

The veterinary staff at the Animal Health Center is responsible for the preventive animal health and nutrition programs, and the medical care of the entire collection.

The staff includes two full-time staff veterinarians, three veterinary technicians, a hospital supervisor and a medical records secretary. Some of the procedures performed in 2008 included: 355 anesthetic procedures, 546 blood sample analyses, 1,299 parasite exams run on 607 samples, 1,675 written prescriptions, 248 radiographic procedures and 3,248 medical record entries for 800 individual animals.

The Animal Health Center (AHC) was very busy in 2008. An average of 14 to 15 animals per night were housed at the AHC throughout the year, for a total of 5,270 patients-days. During the busy shipping months of April and May, an average of 20 to 25 animals were housed at the hospital each day. Many of these were new animals kept in quarantine before release to the main zoological collection.



A few of the memorable clinical cases treated in 2008 included: a reindeer calf rejected by its mother that was hand-reared and returned to its exhibit after several months; a lame yellow-footed tortoise with a fractured humerus diagnosed by 3-D reconstructive CT scanning and

taken to the UW-Madison veterinary school for successful orthopedic surgery; and a Humboldt penguin juvenile, Penelope, with simultaneous aspergillus and avian pox infections. Our Aviary does not have an area to separately house a penguin requiring medical attention for an extended length of time. Although Humboldt penguins don't have the cold temperature requirement that some other species of penguin do, the "cold room" at the new hospital provides a climate-controlled area that can be kept at a temperature comfortable for Humboldt penguins. This room also has a small pool where Penelope could swim, bathe and keep clean. She recovered well, and was returned to the exhibit.

Both the Zoo pathology fellow program and the clinical medicine residency continued in collaboration with the University of Wisconsin-Madison School of Veterinary Medicine. The clinical residency program is a three-year program that provides specialty training in zoo and exotic animal medicine to post-graduate veterinarians. There is considerable demand for veterinarians trained in this specialty.

With permission from the Zoo Director, and with funding from the Zoological Society, we were able to expand our clinical residency program to initiate a second program. The two clinical residents alternated their time with one resident spending two months, and the other resident spending three months at our Zoo.

The pathology program offers specialized training to pathologists interested specifically in zoo and exotic animal pathology, and provides us with information crucial to managing our collection. Our fourth pathology fellow since the program's 1997 inception started her training in August.

In addition to the three post-graduate veterinary programs, the veterinary staff also conducts a zoo-animal medicine preceptor program for veterinary students. In 2008, two veterinary students participated in this program, spending between four and eight weeks at our Zoo.

The Zoo's staff veterinarians continued to perform their duties as adjunct instructors at the UW-Madison School of Veterinary Medicine.

Animal Records

Since the Milwaukee County Zoo opened in 1892, records have been kept for more than 18,800 individual animals that have been managed in the Zoo's collection. Today, accredited zoos keep very detailed up-to-date records for each animal, telling its life story from birth to death. In addition, our Zoo archives contain ephemeral material including animal inventories; old log books, Zoo annual reports, published articles, prints, slides, 16mm films, and general correspondence. We maintain unique materials from 19th and 20th century institutions from six continents. All of this stored information is available to support research.

We maintain up-to-date records on every animal that arrives at the Zoo. Individuals are assigned a unique number. The animal care staff uses this number to track an individual animal's records so that significant events or changes in its care can be documented. All of the information that the animal care staff observes is reported daily to the registrar, who records the information electronically in a database called the Animal Records Keeping System (ARKS).

The ARKS information includes primary data such as common and taxonomic name, parents (whether at our Zoo or at another facility) date and place of birth, gender and the circumstances of acquisition such as birth, loan, purchase, or donation. Similar facts are recorded when the animal leaves the Zoo, such as the name of the recipient zoo, the date of transfer and terms of the contract or the circumstances of death. Identifying characteristics or marks, all background information, measurements, behavior, breeding management, enclosure information, behavioral enrichment, training, diet/feeding, development, and medical notes and procedures are data recorded in each animal's record.

Animal medical information also is vital to the care of the animal collection. The Medical Animal Records Keeping System, MedARKS, is a database that utilizes information

stored in ARKS, creating a detailed medical record for each animal containing clinical notes, prescriptions, treatments, cryopreservation record and necropsy details.

About once a month, the information in the ARKS database is sent to ISIS (International Species Information System), which links the animals' records as they move between institutions throughout the worldwide zoological community. The merging of these data from each zoo enables ISIS members to share information collected in the ISIS system for management of genetic and demographic programs (such as studbooks or cooperative Species Survival Plans) and their own animal collections. The ISIS central database, located in Minnesota, contains information on 2 million animals – almost 15,000 taxa/10,000 species – held in more than 700 institutions in 72 countries, as well as some animals in the wild who are participants in release and relocation projects.

The Milwaukee County Zoo is consistently recognized for our high standard of records accuracy, and is listed as a Data Quality Champion for being in the top 5% of ISIS members with the highest link rate scores.

Facilities and Improvements

A considerable number of infrastructure projects were planned or completed in 2008. Most of these are not noticed by the public, but are critical for continued Zoo operations. The 2008 projects included: animal life support systems, heating, ventilating, electrical and plumbing upgrades, roof replacements and general repairs.

Major capital projects included the opening of the new Flamingo Exhibit described previously. Also, a conceptual plan and feasibility study was completed for the potential construction of a major new outdoor Hippo Exhibit and expanded indoor hippo facilities. Information also was compiled in preparation for the development of the next Zoo Master Plan.

Humboldt Penguins



Conservation and Research Programs

In 2008, the Zoo managed an ambitious and diverse conservation and research program at local, regional, national and international levels. The Senior Animal Staff, including four specialty Curators, two Staff Veterinarians and the Deputy Zoo Director, develop, implement and manage these programs. Front-line staff actively participates in many of these programs. Collaborative efforts with other conservation-minded institutions and agencies were essential to the effectiveness of these efforts.

In addition to the commitment of Zoo resources and the resources of collaborating institutions, significant funding came from Zoo trust funds and the Zoological Society of Milwaukee. Public and private grants also contributed to the support.

Conservation and Research Program Collaborative Support

The Zoo provides funding and/or staff support to selected conservation initiatives and research projects. Highlights for support in 2008 include:

IUCN Conservation Breeding Specialist Group	Global
Zoological Information Management System Development	Global
Polar Bears International	Pan-Arctic
Great Ape Survival Project	Asia and Africa
National Elephant Center	North America
Tarangire Elephant Project	Tanzania
International Elephant Foundation	Africa and Asia
Snow Leopard International Trust	Nepal
Phoenix Fund Amur Tiger Project	Russia
Tree Kangaroo Species Survival Plan	Papua New Guinea
Piping Plover Recovery and Support	U.S.
Balikpapan Orangutan Society Project	Borneo
Salango Forest Bonobo Project	Democratic Republic of Congo
Berggorilla and Regenwald Direkthilfe Gorilla Project	Rwanda
Kibali Community Fuel Wood Project	Uganda
Cotton-top Marmoset Rabies Research	Brazil
Madagascar Wildlife Conservation	Madagascar
Baird's Tapir Species Survival Plan	South America
Humboldt Penguin Ecology Study	Chile
Humboldt Penguin Census	Chile
Guam Rail Conservation	Guam
Lion Tamarins Conservation	Brazil
Amphibian Rescue Operation	Panama
Grenada Eleuth Frog Study	Grenada
Rock Iguana Conservation	Jamaica
Rock Iguana Conservation	Grand Cayman
Whooping Crane Recovery	U.S.
Cognition in Apes Study	U.S.
Whooping Crane Sampling Techniques	Wisconsin
Rattlesnake Ecology Study	Wisconsin
Massassauga Genetics Study	Wisconsin
Ornate Box Turtle Headstart Program	Wisconsin
Butler's Garter Snake Ecology	Wisconsin
Bat Conservation and Management Plan	Wisconsin
Migratory and Resident Avifauna Study	Milwaukee, Wisconsin
Fetal Development in Bonobos	Milwaukee, Wisconsin

The Zoo also provided funding for collaborative conservation and research initiatives including:

- National Elephant Center
- AZA Contraception Center
- International Iguana Foundation
- Amphibian Taxon Advisory Group
- Avian Scientific Advisory Group
- Humboldt Penguin Species Survival Plan
- IUCN Tapir Specialist Group
- Partners in Amphibian and Reptile Conservation
- International Species Inventory System

Species Survival Plans®

Our Zoo cooperates with all major zoos and aquariums in North America to enhance the survival of endangered species in our collections and in the wild. This is done through Species Survival Plans® of the Association of Zoos and Aquariums. Groups of zoo scientists and collaborating experts develop breeding plans to help protect the genetic variations of each of these species.

Collaborative programs also are developed with countries that have these species in the wild to assist in conservation of these habitats.

Our Zoo participates in all Species Survival Plans® that exist for the species in our collection, including:

Alligator, Chinese	Gibbon	Penguin, Humboldt
Baboon	Gorilla, Western Lowland	Pigeon, Pink
Bear, Polar	Guenon	Rail, Guam
Boa, Virgin Islands	Hornbill	Rattlesnake, Aruba Island
Bongo, Eastern	Kangaroo, Matschie's Tree	Rattlesnake, Eastern
Bonobo	Kingfisher, Micronesian	Rhinoceros, Black
Cat, Black-Footed	Lemur, Mongoose	Prosimian, Nocturnal
Cheetah	Lemur, Ring-Tailed	Tamarin, Cotton-Top
Cichlids, Lake Victoria	Lemur, Ruffed	Tamarin, Golden Lion
Colobus	Macaque	Tamarin, Golden-Headed Lion
Elephant	Massasauga, Eastern	Tapir, Baird's
Hippopotamus	Monkey, Goeldi's	Tapir, Malayan
Iguana, Rock	Monkey, Spider	Tiger
Jaguar	Mynah, Bali	Toad, Puerto Rican Crested
Leopard, Snow	Orangutan	Vulture, Cincereous
Lion	Panda, Red	
Fox, Fennec	Peafowl, Congo	

Groups of Species

The Zoo's scientific staff are members of specialist groups devoted to the conservation and management of groups of species. These are called Taxon Advisory Groups (TAGs). We actively participate in the following TAGs:

Elephant SSP®/TAG	Wild Pig/Peccary/Hippo TAG	Prosimian TAG	Galliformes TAG
Amphibian TAG	Ape TAG	Rodent/Insectivore/ Lagomorph TAG	Gruiformes TAG
Antelope and Giraffe TAG	Chiropteran TAG	Small Carnivore TAG	PACCT TAG (Passerines)
Aquatic Invertebrate TAG	Marsupial and Monotreme TAG	Anseriformes TAG	Parrot TAG
Bear TAG	New World Primate TAG	Charadriiformes TAG	Pelecaniformes TAG
Canid and Hyaenid TAG	Old World Monkey TAG	Ciconiiformes TAG	Penguin TAG
Chelonian TAG	Pangolin/Aardvark/Xenarthra TAG	Columbiformes TAG	Piciformes TAG
Crocodylian TAG		Coraciiformes TAG	Raptor TAG
Deer (Cervid/Tragulid) TAG			Ratite TAG
Equid TAG			Turaco/Cuckoo TAG
Felid TAG			Marine Mammal TAG
Freshwater Fishes TAG			Rhinoceros TAG
Lizard TAG			Terrestrial Invert. TAG
Marine Fishes TAG			
Sheep and Goat (Caprid) TAG			
Snake TAG			
Tapir TAG			

Our Zoo collaborates with other AZA institutions in Propagation Management Plans (PMPs) to ensure the long-term genetic diversity of populations of various species, including:

Aracari, Green
 Argus, Malayan
 Barbet, Bearded
 Barbet, Red and Yellow
 Bluebird, Fairy
 Bustard, Buff-crested
 Cacique, Yellow-rumped
 Cardinal, Red-crested
 Curassow, Wattled
 Dikkop, Spotted
 Dove, Bartlett's Bleeding Heart
 Dove, Beautiful Fruit
 Dove, Black-naped Fruit
 Dove, Emerald
 Dove, Jambu Fruit
 Dove, Luzon Bleeding Heart
 Dove, Marianas Fruit
 Dove, Pink-necked (Temminck's) Fruit
 Dove, Yellow-breasted Ground
 Duck, Spotted Whistling
 Falcon, African Pygmy
 Finch, Gouldian
 Flamingo, Caribbean
 Flamingo, Chilean
 Flamingo, Greater
 Flamingo, Lesser
 Frogmouth, Tawny
 Go-away Bird, White-bellied Grey
 Goose, Nene
 Guineafowl, Vulturine
 Heron, Boat-billed
 Honeyeater, Blue-faced
 Hornbill, Abyssinian Ground
 Hornbill, Red-billed
 Hornbill, Southern Ground
 Hornbill, Sunda (Wrinkled)
 Hornbill, Trumpeter
 Ibis, Scarlet
 Jacana, African
 Jay, Plush Crested
 Kookaburra, Laughing
 Lapwing, Masked
 Lapwing, Spur-winged
 Laughing Thrush, White-crested
 Laughing Thrush, Yellow-throated
 Leiothrix, Red-billed
 Monal, Himalayan
 Motmot, Blue Crowned
 Mousebird, Speckled
 Mynah, Golden-crested
 Oropendola, Crested
 Owl, Snowy

Peafowl, Green
 Pelican
 Penguin, Gentoo
 Penguin, Magellanic
 Penguin, Short-crested Rockhopper
 Pheasant, Edward's
 Pheasant, Hume's
 Pheasant, Malayan Peacock
 Pheasant, Mountain Peacock
 Pheasant, Palawan Peacock
 Pigeon, Crowned
 Pigeon, Green-naped Pheasant
 Pigeon, Nicobar
 Pigeon, Pied Imperial
 Pigeon, Salvin's
 Pitta, Hooded
 Roller, Blue-bellied
 Screamer, Crested
 Seriema, Red-legged
 Spoonbill, African
 Starling, Emerald
 Starling, Golden-breasted
 Stilt, Black-necked
 Stork, Abdim's (White Bellied)
 Stork, Hamerkop
 Stork, Marabou
 Stork, Milky
 Stork, Painted
 Stork, Saddle-billed
 Stork, White
 Stork, Yellow-billed
 Sunbittern
 Swan, Trumpeter
 Tanager, Blue-gray
 Tanager, Silver-beaked
 Tanager, Turquoise
 Teal, Marbled
 Tern, Inca
 Tinamou, Elegant Crested
 Tragopan
 Trumpeter, Grey-winged
 Turaco, Lady Ross'
 Turaco, Red-crested
 Turaco, Violaceous
 Vulture, King
 Vulture, Ruppell's Griffon
 Weaver, White-headed Buffalo
 Wood Partridge, Crested
 Woodhoopoe, Green
 Porcupine, North American
 Eland, Common and Cape
 Gazelle, Speke's

Giraffe, Reticulated and Rothschild
 Kudu, Greater
 Warthog
 Waterbuck, Common
 Zebra, Plains
 Frog, Blue Poison Dart
 Salamander, Texas Blind
 Tarantula, Mexican Red-kneed
 Hyena, Spotted
 Boa, Jamaican
 Cantil, Taylor's
 Chuckwalla, San Esteban
 Gecko, Leaf-tailed
 Lizard, Mexican Beaded
 Monitor, Asian Forest
 Rattlesnake, Mexican Lance-headed
 Skink, Prehensile-tailed
 Tortoise, Galapagos
 Turtle, Roti Island Snake-necked
 Armadillo, Southern Three-banded
 Bat, Common Vampire
 Bat, Straw-Colored Fruit
 Chevrotain, Greater Malayan
 Kangaroo, Red
 Kinkajou
 Marmoset, Pygmy
 Meerkat
 Mongoose, Dwarf
 Otter, North American River
 Sea Lion, California
 Seal, Harbor



Individual Conservation and Research Projects

Piping Plover

Each year, our Zoo sends aviculture staff members to assist United States Fish and Wildlife Service (USFWS) biologists in Michigan with the rearing of abandoned piping plover chicks. These chicks are brought in as eggs at the University of Michigan Biological Field Station and are hatched for re-release into the wild. These activities support the long-term commitment by the Milwaukee County Zoo to the conservation of the piping plover.

The Great Lakes population of the piping plover was listed as an endangered species in 1986. Its decline is attributed to habitat loss and degradation due to the encroachment of humans on its nesting environment, beaches and inland lakes and rivers. Nest disturbance and predation, also largely due to the presence of humans, also has contributed to population decline.

Zoo staff has participated in the development of captive husbandry protocols and designated research projects designed to benefit wild populations of piping plovers. Staff members from participating zoos assist field biologists each summer with nest monitoring activities and salvage rearing. Each year Zoo staff participates in the Great Lakes salvage-rearing program, assisting staff USFWS biologists with salvage rearing of eggs and chicks in this lake region.

Humboldt Penguin

In 1992, Zoo staff began studying Humboldt penguins in their natural habitat in Chile. In 1994, a long-term research program was initiated to study a breeding colony of Humboldt penguins in Algarrobo, Chile. The ecology and health of these endangered penguins are being studied with the goal of enhancing species conservation.

Genetic variations of captive and wild populations of the Humboldt penguin are being assessed to determine if observed genetic variation rates resemble predicted diversity. This information is used to evaluate pedigree analysis models used by Species Survival Plans® to make breeding recommendations. Work also is beginning on genetic fingerprinting of family groups in the wild to determine true parentage of the offspring. We are providing samples to the Brookfield Zoo for analysis. In addition, the gender of individually identified wild penguins is being determined using DNA study techniques developed by the Brookfield Zoo.

Our Zoo also has been coordinating funding for annual population censuses of the wild penguins in Chile for the past 10 years. Annual censuses not only provides us information on the size of the wild population, but also allows us to detect trends in population growth or decline, and population movements, particularly in reference to El Niño weather patterns. This information is critical to understanding the behavior and activity of wild Humboldt penguins.

In addition, the Zoo is funding the construction of artificial penguin burrows in Chile to help chick survival of this endangered species to increase penguin numbers. Penguin nests are often flooded by spring and fall rains, and recently pelicans have been taking over penguin nest sites.



Whooping Crane Recovery

The Milwaukee County Zoo assists the International Crane Foundation and USFWS with whooping crane recovery by acting as a medical care location for injured whooping cranes that were part of the release program.

In 2006, a juvenile whooping crane, Torch, was received prior to release with a broken wing and had been deemed un-releasable by USFWS. An exhibit was created for Torch at the Wong Family Pheasantry to house this bird after his injury had healed. Torch currently resides in this exhibit where Zoo visitors can not only learn his story, but also read the full history of the Crane Recovery Project through exhibit graphics.

In 2008, another un-releasable juvenile, Tiki, was brought to our Zoo as a companion for Torch. Tiki hatched from an egg laid in the wild, but artificially incubated and hand-reared. She was raised in Patuxent, Maryland before traveling back to Necedah to be part of the Autumn Release Program. Here, injuries sustained from another crane during her flight training rendered her un-releasable. It's our hope at the Zoo to successfully introduce Tiki to Torch, and that the pair may someday be able to participate in the captive breeding program as possible surrogate parents.

The Whooping Crane Recovery Program is responsible for bringing the number of wild cranes back from a low of 16 individuals in the 1940s, to a total of more than 500 individuals collectively in captivity and in the wild. The International Crane Foundation uses donated funds to aid in the captive rearing, release and management of wild cranes, as well as developing new release techniques to bolster the existing population. The Foundation also does outreach programs to educate the public on the plight of the cranes as well as conduct studies on environmentally friendly and non-toxic alternatives to controlling sandhill crane depredation on crops.

Great Ape Cognition Study

The great ape collection at the Milwaukee County Zoo represents a unique opportunity for exploring questions related to the understanding of the functional qualities of tools, and the effects that an individual's own behavior has on their use. Because our animals have participated for many years in specific training to facilitate veterinary evaluation, all gorillas, orangutans and bonobos represent unprecedented and highly unique groups for studies that would not be possible almost anywhere else in the world. Dr. Sally Boysen has begun a series of tools tasks at the Zoo, and completed data collection for the first project during which the animals are presented with a simple tools task. The results of these tests are being analyzed and compared with observations of wild chimpanzees.

Migratory and Resident Avifauna Study

Zoo staff and volunteers are mist netting and banding wild birds on Zoo grounds to determine the numbers and species that use our grounds as a stopover site during migration. This is an ongoing project with 163 species of native migratory birds identified to date. Wisconsin lists 27 of these species as endangered or rare. Studies also are in progress to identify the bird species that nest on Zoo grounds – currently, 35 nesting species have been found. Because of these remarkable findings, the Wisconsin Department of Natural Resources (DNR) has designated the Milwaukee County Zoo as a recognized migratory bird stopover habitat. In addition, a bird-banding demonstration is conducted each year during the Zoo's special event, Party for the Planet. Visitors have the opportunity to observe the banding process and release birds.

Ornate Box Turtle

The Zoo raised 24 endangered ornate box turtles to be released into a wild prairie remnant in south central Wisconsin. In 1996 and 1997, the Zoo developed raise and release procedures for this highly successful DNR program. During a single winter at the Zoo, these turtles may grow from a one-third ounce hatchling to as much as five ounces. In the wild, it may take as long as seven years to reach this size, at which time they are practically predator-proof. The Racine Zoo also participates in this program, and the Nature Conservancy has adopted its protocols to help increase ornate box turtle populations in its Wisconsin reserves. As of June 2008, more than 750 turtles were released; of these, our Zoo raised 237 turtles.

Rattlesnakes

The Wisconsin Rattlesnake Hotline provides Wisconsin property owners with an alternative to killing unwanted rattlesnakes. Rattlesnakes are moved a short distance from the capture site and released. This allows for positive interactions and educational opportunities for herpetologists and general public alike. This is a cooperative project with the Wisconsin DNR.

Timber rattlesnakes obtained through the Wisconsin Rattlesnake Hotline and field surveys are implanted with radio transmitters if their den site is unknown. New den sites are located each fall. This provides the Wisconsin DNR with information that may dictate land management or acquisition decisions by the state of Wisconsin.

In 1999, the Milwaukee County Zoo, with funding from the Zoological Society, began a long-term study of timber rattlesnakes in southwestern Wisconsin. This study has allowed the DNR for Wisconsin and the DNR for Minnesota to adopt a conservation strategy that had been developed for New York. One of the initial goals of the study was to develop a scientifically valid database that could be used by a Wisconsin university student as the basis for graduate studies. Several of the snakes used for his study have been "on the air" since 1999. This is a cooperative study with the Wisconsin DNR and UW-Stevens Point.

Since 1993, the Milwaukee County Zoo has been marking prairie snake species for population studies at several sites in Wisconsin. Species studied include timber rattlesnakes, bullsnakes, black rat snakes and racers.

Grenada Frog

The Grenada frog was once widespread on the island nation of Grenada. During the late 1880s, a related frog species, Johnstone's frog, was introduced. Since that time, Johnstone's frog has spread throughout the island, and the Grenada frog has retreated to small isolated pockets (seven square miles) in the mountain rainforests. In 2003, our Zoo, the Milwaukee Public Museum and the Grenada Forestry Department initiated a field-study to determine if these two species can successfully coexist. Populations of both frogs seem to have decreased since 2004.

Grenada Bank Treeboia

The Grenada Bank treeboia is only found on the islands in the Grenada Bank. Although widespread, populations are decreasing at a number of localities on the island of Grenada. Our Zoo is cooperating with the Milwaukee Public Museum for research on this treeboia.

Rock Iguanas

Our Zoo has been a longtime supporter of rock iguana conservation in the genus *Cyclura*. Since 2003, this support has increased with the addition of fieldwork studies of the Grand Cayman blue iguana and Jamaican iguana. Blue iguanas are one of the most endangered lizard species in the world.

A 2003 census indicated that there might have been as few as 12 blue iguanas in the wild. Because of the efforts of several zoos, the population is now estimated to number more than 200. Once thought to be extinct in the wild, the Jamaican iguana is still very much in peril. Last year the number of known breeding females increased by 10%, from 17 to 19 females.

Our Zoo has participated in the fieldwork for this collaborative effort, resulting in successful releases of captive-hatched, raised and released iguanas back into the wilds of Grand Cayman and Jamaica. Also, through observations and radio tracking, data has been collected for the first time on the habits of these rare species from both raised and released iguanas and free-ranging wild individuals. More fieldwork is scheduled, and our Zoo will be sending additional staff to assist. Zoo personnel assist fieldworkers with: protection of nest sites, nest monitoring, health screenings, and radio tracking. They also assisted with the maintenance of iguana raise and release facilities.

Butler's Garter Snakes

The Butler's garter snake is an endangered species restricted to southeastern Wisconsin. In 2007, the Wisconsin DNR brought together developers, land owners, our Zoo and other conservation organizations to develop a management plan for this species. This plan identified numerous gaps in our knowledge that were crucial to the development of a successful plan. As a result, the Zoo partnered with the Urban Ecology Center at Riverside Park to seek answers to several questions. What is the dispersal distance of the snakes? What is the population density of the snakes in Riverside Park? How fast do they grow? These studies involve radio tracking, finding and capturing snakes and marking them for individual identification. Hundreds of hours were spent during the year, and several additional seasons of work will be needed to adequately address these issues.

Starhead Topminnows

Starhead topminnows are endangered in Wisconsin. Although there have been a few breedings in the private sector, there are no reports of breeding in zoos or aquariums. Several pairs were collected in July 2007 with the intent of developing spawning techniques that could be used by the Wisconsin DNR should a captive breeding program become a necessity. Successful breeding occurred during December 2007. Fishes from this program are currently displayed at the Urban Ecology Centers in Milwaukee and other aquariums throughout the country.



Starhead Topminnow

Wisconsin Ephemeral Pond Project (WEPP)

Ephemeral ponds (also known as vernal pools, autumnal pools) are temporary ponds that play a vital role in the landscape. These ponds are the spawning grounds of frogs, toads, salamanders and many types of invertebrates that are not found anywhere else. The Zoo grounds are home to nine ephemeral ponds. The purpose of this pilot program is to develop a

network of citizen-based monitors who will identify and monitor ephemeral ponds across the state. Long-term goals are the protection and conservation of ephemeral ponds. The Zoo and 10 other local nature centers are involved in the development of WEPP in collaboration with the Wisconsin DNR and the UW Extensions. For more information about this project, visit the WEPP website: watermonitoring.uwex.edu/level3/WEPP

Great Ape Ultrasound Studies

For more than 10 years, Zoo staff and volunteer medical professionals have performed ultrasound studies on our great apes. As a result of extensive positive reinforcement training by our staff, the great apes voluntarily participate in these painless studies – without restraints, sedation or anesthesia. The animals look forward to these procedures and willingly cooperate. The ultrasound studies include heart studies of bonobos, gorillas and orangutans, and fetal development studies of bonobos. Our Zoo has been one of the first in the world to do these types of studies with the great apes. A groundbreaking 8-year study of fetal development in bonobos has resulted from these efforts.

Zoo Animal Collection Sampling Program

Each year, Zoo staff collects samples from our animals to share with other zoos and researchers to contribute to the understanding and conservation of animals. Many of these samples are collected with the animals' voluntary cooperation using positive reinforcement training. Other samples are collected opportunistically when the animal is anesthetized for a medical procedure. Also, whenever an animal dies, a complete necropsy (animal autopsy) is conducted and samples collected.

For example, hair and horn samples are sent to a US Fish and Wildlife forensics laboratory to help custom agents identify illegal imports of endangered species. Fecal and urine samples are collected to analyze hormone levels for reproduction research. Blood samples are collected to conduct genetic studies. Medical images such as ultrasounds are collected to study fetal development and heart functions.

Program Management

Zoo scientific staff members hold senior management positions in national and international programs through the Association of Zoos and Aquariums and other conservation entities. These management positions include:

- Veterinary Advisor: Bonobo SSP®, Ring-tailed Lemur SSP®, Penguin TAG, Ape TAG
- Chairperson: AZA Charter and Bylaws Committee
- Vice-chair: Humboldt Penguin SSP®
- AZA Delegate: Convention on International Trade of Endangered Species
- Steering Committee: Apes TAG, Veterinary Advisor Group, Freshwater Fish TAG, Eastern Massasauga Rattlesnake SSP®, Lake Victoria Cichlid SSP®
- Management Group: Bonobo SSP®, Gorilla SSP®, Humboldt Penguin SSP®
- American Association of Zoo Veterinarians: AZA Veterinary Advisor Liaison, Treasurer
- Emeritus Associate Editor - Journal of Zoo and Wildlife Medicine
- International Studbook Keeper/PMP: Yellow-backed duiker
- Zoological Registrars Association: History Committee Chair
- Regional Studbook Keeper: Red kangaroo

Presentations/Publications

Animal Division staff deliver more than 1,000 formal presentations and innumerable informal presentations to the visiting public every year. In addition, Zoo staff develop programs, publish articles, annual studbooks and population management plans and research papers, and deliver presentations locally, regionally and internationally to contribute to conservation efforts.

Administration and Finance

Background and 2008 Review

This Section oversees the following: Cash Management, Financial and Capital Project Planning, Accounts Payable and Receivable, Personnel and Payroll, General Office Services (including coordination of security, emergency medical support, reception and switchboard, radio dispatch and clerical support), Information Technology and oversight of the Zoo's Green Committee. The Section also completed and submitted the 2008 year-end financials. The Zoo ended the year with a tax levy deficit of \$478,456 and had an increase of \$98,129 in the Zoo trust funds.

Cash Management

This area includes reconciliation of cash receipts to our point-of-sale system, preparation of the bank deposits, set up of cash register starting banks and daily support of the cashiers for change and deposits of funds. In 2008, the staff continued to improve the efficiency and internal control of the cash management function resulting in a reduction of seasonal labor. The Zoo was able to significantly reduce its credit card processing fees by implementing a change of credit card processors.

Financial and Capital Project Planning and Control

This Section involves coordination of the budget process. Balancing the budget is challenging when support is reduced, service, as well as entertainment values are maintained, new revenue sources are explored and priorities are re-evaluated. Financial reporting and analysis continued to be performed on a daily, monthly and annual basis, with comparisons to the budget as well as to the previous year. Revenue sharing contracts were improved to enhance vendor accountability. Staff updated the Zoo's Fixed Asset Inventory in 2008.

The Zoo researched a variety of systems for event management, inventory and point-of-sale to assist with the preparation and issuance of a formal Request for Information. Several key vendors responded and demonstrated their products. Specific test data was utilized in follow-up demonstrations to allow for effective comparison of vendor solutions. The capital budget was approved for the systems. Information gathered during the system research and demonstrations was used to prepare and issue the formal Request for Proposal at the end of the year. Responses will be evaluated in 2009.

Accounting (Accounts Payable and Receivable)

During 2008, Accounts Payable and Receivable processed purchasing requisitions and receipts, monitored the credit card system, reviewed sales documentation, prepared invoices, tracked accounts receivable and entered financial transactions into the general ledger. Internal controls were tightened on processing of travel expenditures and animal food inventories.

Information Technology

Information Technology functions are provided by Zoo staff, Milwaukee County's Department of Administration - Information Management Services (IMSD) and outside consultants. The Zoo continues to partner with IMSD for technical staff on site to assist the Zoo with its point-of-sale, inventory and event management systems. The IMSD staff reduced the Zoo's expenses by performing most register repairs on site, rather than sending equipment to an outside vendor. In 2008, the Zoo continued improving its monitoring of financial information through point of sale, event management and Milwaukee County financial systems.

Green Committee

The Milwaukee County Zoo has implemented recycling programs and "Earth friendly" projects for many years. Recycling efforts include aluminum cans, light bulbs, food and motor oils, scrap metals, restaurant cups, plastic bottles, paper and coffee grinds. In 2008, the Zoo implemented an energy savings program by investing \$2 million in upgraded electrical, natural gas, water and sewer infrastructure. The Zoo also has used green friendly practices in building construction and other projects.

In 2008, a Green Committee was created to address the Zoo's role in recycling and incorporating "Earth friendly" products and practices into its operation. The committee adopted the following mission statement: The mission of the Green Committee is to identify, advance and promote policies and practices at the Zoo aimed at benefiting the environment, as well as demonstrating and educating the general public and private sector to reduce use, re-use and recycle the Earth's resources. Objectives include educating employees and visitors on green practices, collaborating with private businesses for partnerships and support, and looking at ways to generate additional revenues and save expenditures with green practices.

Human Resources

The Human Resources Section consists of the Human Resource Coordinator, Administrative Specialist and a seasonal Payroll Assistant. Responsibilities include coordinating and performing a variety of technical and professional personnel-related tasks. General duties performed entail managing the payroll and human resources function to include grievance handling, recruitment, promotion, training, disciplinary actions, transfers, employee benefits and departmental diversity issues.

Also, the Human Resource Coordinator represents the Zoo as part of committees; appeal boards, meetings and hearings related to various personnel issues.

Highlights from 2008 include:

- Took part in job fairs in Milwaukee County to ensure a diverse work force
- Worked together with the Milwaukee County Department of Human Resources to process applications and hire zooworkers and Family Farm attendants
- Worked together with the Milwaukee County Department of Human Resources to enable the Zoo to advertise current "hot jobs" on the County Web site
- Accomplished all of the 2008 Affirmative Action goals and identified tasks for 2009
- Assisted in the hiring of six individuals for full-time employment with the Zoo
- Worked in cooperation with the Milwaukee County Department of Human Resources to prepare Zoo employees for the County's new time and attendance, payroll, benefits and recruitment system

Safety and Training

The Safety and Training Section is comprised of the Safety and Training Specialist and a seasonal Training Assistant. The Section is responsible for instructing Zoo employees in Regulatory Compliance Programming and Training. The Section also is responsible for maintaining first aid kits, fire extinguishers and emergency chemical exposure stations. In addition, this Section is responsible for assessing workplace hazards, developing safe work practices and assigning proper personal protective equipment.

This Section also conducts the annual seasonal employee orientation sessions, provides identification badges and distributes employee uniforms. Material Safety Data Sheets (MSDS) management, pesticide usage reports and annual Tier II reports are processed and completed by this Section. The Safety and Training Specialist and the assistant are responsible for accident investigation and on site security system maintenance, including the video camera surveillance program. The Zoo Safety Specialist also chairs the Zoo Safety Committee, which meets monthly to address Zoo safety issues.

State and federal compliance regulations mandate the annual safety training programming conducted by the Section. In addition to the required programming, the Safety and Health Section began coordinating the annual Employee Safety and Health Fair, which includes the Department of Parks, Recreation and Culture. The 2008 fair consisted of the following courses: Hazard Communication, Chemical Safety, Bloodborne Pathogens, Ergonomics, Personal Protective Equipment, Respiratory Protection (including Respirator Fit Testing) and Emergency Response Training.

In addition, the Section is responsible for workman compensation claims, tracking, reporting and maintaining the state of Wisconsin property insurance database. These activities have shown to have a positive effect on the Zoo's overall workman compensation claims and a reduction in the number of injuries reported by Zoo employees. In 2007, the Zoo reported 28 work related injuries, resulting in \$124,542 in paid costs. In 2008, 20 work related injuries were reported, resulting in \$11,044 in paid costs.

Diversity Committee

The Diversity Committee is a group formed within the parameters of the Human Resources Section with a primary function of providing opportunities for better understanding of civil rights by Zoo personnel.

The Diversity Committee consists of seven representatives from various Divisions who annually make recommendations concerning equal opportunities for all employees regardless of race, color, sex, sexual orientation, religion, national origin, age, handicap and other non-merit factors.

The committee acts as a resource for all Zoo staff by providing information and addressing particular concerns or complaints. Members attend quarterly training sessions that emphasize diversity-related issues in the workplace. Committee members also provide outreach through activities that promote diversity in the workplace.

Public Affairs and Services

2008 Highlights

The Public Affairs and Services Division consists of four Sections: Group Sales, Public Relations, Special Events and Special Programs. In addition to these areas, the Division is responsible for the overall marketing, promotion and advertising of the Zoo. The staff includes: a Division Director, four Coordinators, four full-time staff and approximately 50 seasonal zooworkers.

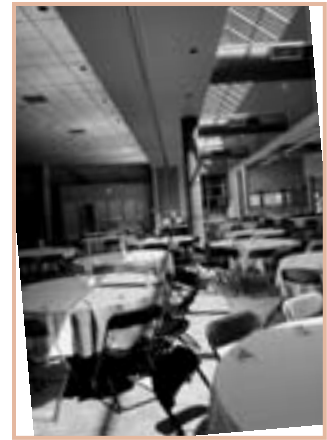
Group Sales

In 2008, thousands of visitors enjoyed private events related to corporate, non-profit functions at the Zoo. A private event may include the rental of a picnic area, a building rental such as the Apes of Africa Building, or an entire grounds rental, in which an organization has exclusive rights to the park. In 2008, the Group Sales Section facilitated a total of 603 events on Zoo grounds, which included 13 entire Zoo grounds rentals, 228 picnics and 362 facilities rentals.

The Zoo's Group Sales Section is responsible for the implementation of all contractual agreements and the management of corporate, non-profit and private events held on the Zoo grounds. Group Sales duties also include the sale and distribution of all advanced and consignment tickets throughout Wisconsin and Illinois.

During the course of the year, Group Sales events maintained a positive financial impact on the Zoo's fiscal revenue and attendance budget. Revenue and attendance highlights include:

- Group Sales set a new record for revenue production, as 2008 amounted to \$2,010,003, a 17.09 % increase in comparison to \$1,716,572 in 2007. Also, Group Sales revenue production accounted for 12.63% of the Zoo's total net revenue during fiscal year 2008.
- Other significant revenue production attributable to corporate Group Sales events in 2008 included the following categories: Zoo Catering - \$140,958; Train Rentals and Passes - \$94,689; Special Exhibits Rentals and Passes - \$36,033; Zoomobile Rentals and Passes - \$28,846; Carousel Rentals and Passes - \$16,333. All of these revenue categories translate into an additional total revenue contribution of \$316,859.
- Group Sales attained 39.93 % of the Zoo's total paid gate admissions and 20.49% of the Zoo's total attendance.
- Of greater significance, total Group Sales expenditures in 2008 amounted to only 1.921% of the Zoo's expenditure budget and 2.02% of the Zoo's personnel budget. This resulted in a positive net profit of approximately \$1,623,003 to Milwaukee County in fiscal 2008.



Special Events

Each year, the Public Affairs and Services Division coordinates more than 20 special events held on grounds. In 2008, this Section also assisted in a few new events, including Party for the Planet and Breakfast and Lunch with the Bunny. Here are event highlights from the year:

- The year got off to a “rompin’” good start as more than 1,200 participants laced their running shoes and hit the pavement for the traditional running of the **Samson Stomp**, sponsored by **Gatorade and Pick 'n Save**, on January 20. Despite temperatures in the single digits, visitors began their day with either a 5K run, or a shorter, “fun run” for the smaller participants. After the run and award ceremonies, guests could enjoy the animal exhibits and various Zoo attractions.
- On March 15, visitors made the Zoo part of their Easter weekend plans with **Breakfast and Lunch with the Bunny** at either 9 a.m. or noon. More than 345 attendees shared a special meal with the famous Bunny himself, and took part in Easter-themed sing-a-longs and activities. The event proved so popular that the Special Events Section hopes to add a second day to this event in 2009.
- Saturday, April 19 marked our premier **Party for the Planet** event, in conjunction with national Earth Day festivities. The Zoo came alive with a variety of activities highlighting the importance of conservation, and preserving our environment for future generations. The 2008 Party for the Planet focused on all frog species, as the Association of Zoos and Aquariums recognized the year as “The Year of the Frog,” and drew attention to the need for preserving these animals and saving their habitats.
- During our largest revenue-generating event, the **Milwaukee Journal Sentinel a la Carte**, approximately 80,500 guests took part in the food and fun at this popular summer destination. We welcomed national performers Head East, American Idol’s Phil Stacey, Lou Gramm and Heidi Newfield, drawing admiring fans to the festival. New restaurants to our mix included, Bonefish Grill, Alioto’s and Trinity Three Irish Pubs.

Special Programs

The Special Programs Section of the Milwaukee County Zoo is responsible for overseeing these areas: The Oceans of Fun Seal and Sea Lion Show sponsored by MillerCoors, our temporary summer special exhibits, audiovisual services, outreach activities and the Peck Welcome Center. In addition, this Section works directly with the Zoological Society, serving as a liaison for all Zoological Society events taking place at the Zoo.



Following are the 2008 highlights:

- The MillerCoors Oceans of Fun Seal and Sea Lion Show is a 20-minute presentation sponsored by MillerCoors, which entertains and educates visitors about seals and sea lions through a live animal show. The shows generated \$149,000 in revenue for the year.
- Also during the summer, visitors enjoyed the special exhibit, **Sting Ray & Shark Reef**, May 24 through September 7, and weekends through September. The exhibit, sponsored by Sundance Vacations, and located in the Otto Borchert Family Special Exhibits Building, actually exceeded our budgeted attendance, as almost 280,000 visitors enjoyed these intriguing underwater animals. This resulted in an audience penetration of 31.67%. The Special Programs Section coordinated and supervised staff for the exhibit.
- The Special Programs Section continued its partnership with the Zoological Society, serving as a liaison to facilitate all of the Society’s events held on Zoo grounds. There were 22 events during a total of 31 dates during the year. This partnership serves to strengthen the overall relationship between the Zoo and the Zoological Society.
- Finally, Zoo operations were enhanced by the efforts of the Audiovisual Section. Areas served included: the Animal Division, Public Relations, Group Sales and Special Events. Photos, videos and visual presentations were used for newspaper and magazine articles, animal identification, Zoo marketing and promotional campaigns, collateral pieces and the audiovisual needs for Group Sales clients.



Media Relations | In 2008, the Zoo received positive media coverage from broadcast, print and electronic media outlets. Some of the subjects covered included: the arrival of orphaned infant orangutan, Mahal, enrichment activities for our elephants, which included paintings done by these animals and sold as fundraising pieces, and the Zoo as an attraction for visitors during the winter months.

Following are a few media highlights from the year:

- The Zoo was featured in a special three-part series on the front page of the Milwaukee Journal Sentinel July 6-8. The article was entitled “Ambassador Mahal – Face of a Dying Species,” and chronicled the story of an orphaned orangutan named Mahal. This infant orangutan came to our Zoo from the Cheyenne Mountain Zoo in Colorado to be paired with a possible surrogate orangutan mother, MJ.

Mahal was featured on the Journal Sentinel Web site through a live Web cam for several months during the year. Curious visitors were able to view the new relationship between Mahal and MJ, and Mahal’s adjustment to his new surroundings.

The Journal Sentinel also published a book entitled “Little Mahal and the Big Search for a Real Mom” which was sold both in the Zoo’s gift shops and through the Journal Sentinel’s online services. As of December 2008, the Journal Sentinel had sold almost 5,000 copies of the book, and donated \$1,600 of its proceeds to the Orangutan Conservancy.

- Concerning general topics, the Zoo was featured in the Milwaukee Journal Sentinel on approximately 26 occasions during the course of the year, through articles and photos.

- On a regular basis throughout the year, the Zoo was featured in numerous community and statewide newspapers, including: The Wisconsin State Journal and WawatosaNOW.

- Also on a continuing basis, coverage on the Zoo appeared on local television stations (Channels 4, 6, 12 and 58). Topics featured included: Mahal’s arrival at the Zoo, Egg Day activities, the opening of the U.S. Bank Gathering Place and new Flamingo Exhibit, our special exhibit, Sting Ray & Shark Reef, Boo at the Zoo activities, Polar Bear Awareness Day events and polar bear Zero’s birthday activities, to mention a few.



- Our Zoo’s hosting of the annual AZA Conference also received positive media coverage through the following outlets: the Milwaukee Journal Sentinel, the Journal Sentinel Web site, JSONline, the Associated Press, Wisconsin Public Radio, WISN Radio and television stations Channels 4, 6 and 12.

Operations

2008 Highlights

The Milwaukee County Zoo's Operations Department is comprised of the following Divisions: Admissions and Transportation, Concessions and Catering, Grounds, Horticulture, Maintenance, Trades, Custodial, Merchandising and Warehouse and Time and Material/Major Maintenance/Capital Projects Construction Management.

Following are Operations highlights from 2008:

Admissions and Transportation

This Section greets guests entering the Zoo, providing them with essential information for their visit. The Section is responsible for: collecting fees at the admission areas, parking, operating the train, carousel and zoomobile and assisting guests with lost family members or misplaced vehicles. Groups with special needs are accommodated through various discounted rates for admission, rides and attractions. This Section also operates stroller rentals, dog kennels and camel and pony rides, in addition to operating the mold-o-rama machines. Two full-time Managers, two full-time Train Engineers and as many as 60 seasonal employees comprise this Section.

2008 Visitor Services Revenue:

Admissions and Parking	\$7 million
Stroller Rental	\$111,000
Mold-o-Rama	\$119,000
Train Ride	\$614,000
Zoomobile Ride	\$94,000
Sky Safari	\$197,000
Carousel Ride	\$164,000

2008 Highlights:

- Generated more than half of the Milwaukee County Zoo's total revenue for the year
- Refurbished and painted the "Irwin Maier" 1924 steam locomotive
- Partnered with the Grand Avenue Club which assists individuals with special needs to enter the workplace and increase their level of self esteem and independence
- Employed staff support for every event occurring during regular Zoo hours and after-hours events in conjunction with Group Sales, Public Affairs, Education and the Zoological Society

Grounds and Horticulture

The Horticulture Section is part of the Buildings and Grounds Section, and is comprised of two full-time employees and nine seasonal staff members. Duties include: maintaining all of the flower beds and interiorscapes; trimming trees and shrubs; creating flower centerpieces; refurbishing exhibit murals; designing and creating displays for special events such as Halloween, Breakfast and Lunch with Santa, Breakfast and Lunch with the Bunny; designing landscapes; purchasing and maintaining silk plants; controlling weeds and invasive plants, growing animal food treats; harvesting and identifying browse for animals and assisting with park cleaning and snow removal.



2008 Highlights:

- Designed and installed plantings for new U.S. Bank Gathering Place
- Planted and maintained 60,000 annuals and perennials
- Cultivated more than 20,000 summer bedding plants in the Zoo's greenhouses
- Collected and distributed 30 tons of animal browse
- Constructed special displays for the AZA Annual Conference
- Constructed new displays for the Halloween event and carved 400 pumpkins
- Decorated 10 large trees for Christmas and placed outdoor lighting in the main mall
- Completed new landscape areas for Flamingo Exhibit
- Reduced erosion by establishing turf area
- Propagated tropical material for interiorscapes
- Installed topiaries
- Reduced growth of buckthorn and garlic mustard; controlled thistle and burdock
- Aerated all lawn areas including animal exhibits

Maintenance

Maintaining the buildings, grounds, exhibits and public areas are vital to daily Zoo operations. Behind the scenes electrical, plumbing and general maintenance include: operating HVAC and Metasys interface computer boards, repairing animal exhibits, hanging event banners for special events, maintaining lighting which includes green initiative lamps to help reduce the impact on the environment and reduce utility costs, handling emergency calls on a 24 hour, 7-day-a-week schedule, setting-up general events and landscaping and construction project management. The Grounds, Horticulture, Maintenance, Trades and Custodial Sections help to ensure each patron has a safe and enjoyable visit. Their continued hard work will result in the Zoo grounds appearing pleasing to our visitors.



2008 Highlights:

- Roof replacements on North American Barns
- Shift door replacements in Pachyderm Buildings
- Initial replacement of drive-in admission booths
- Small Mammal electrical and heating renovations
- Pachyderm corridor roof and window replacement
- Stall renovations at Winter Quarters: gates, doors and floors
- Apes of Africa exterior repairs/renovation
- HVAC replacement at Administration Annex Building
- Stage façade replacement at Oceans of Fun Sea Lion Show
- U.S. Bank Gathering Place completion

Concessions and Catering

The Concessions and Catering Section provides our guests with service, snacks and food and beverages while visiting the Zoo. In addition, thousands of guests visit the Zoo while attending school trips, weddings, corporate functions and private parties. This Section helps to provide for the needs of these guests.

The staff consists of 175 diverse, seasonal employees and two full-time food service professionals. There are nine food service facilities, four popcorn wagons, three ice cream kiosks and six areas of “grab and go” carts throughout the grounds.

In 2008, the Flamingo Café received a much-needed renovation, which improved the ambiance, menu offerings, traffic flow and revenue. The addition of a “grab and go” coffee shop, featuring Alterra coffee, and bakery and snacks proved a huge success. Revenue generated in these two areas considerably exceeded budget projections.

The addition of the U.S. Bank Gathering Place provided another attractive venue, enhancing guest convenience and comfort while generating additional revenue.

Merchandising

The Merchandising Section is responsible for purchasing, displaying, stocking and selling gifts, souvenirs and sundry items.

The staff consists of one full-time manager and approximately 40 seasonal employees, and has been pivotal in supporting the switchboard employees on weekends and during special events.

In 2008, this Section expanded its program for students and adults with special needs. The program included six students from area high schools and three adults from the Grand Avenue Club. These adults also will be involved in pricing new merchandise items during the winter season. Overall, the program has been rewarding for both the program participants as well as for the seasonal employees.

An additional highlight of 2008 was the expansion of the Karibu gift shop. With the completion of the U.S. Gathering Place, Karibu gained an extra 200-square-feet of space, which helped increase revenue by \$167,000. The year 2008 marked the second best year of sales for the Merchandising Section. The gift shop was not the only area to receive a new look – the merchandise carts were refurbished during the winter, and completed for the summer season.

Revenue also was generated from several other areas. A hat cart was added to the group of merchandise stands, and realized a large profit. Revenue also was gained through non-food vending machines, such as the dog tag and penny press machines. Sales of merchandise to groups and corporate events also were the highest in 2008. Additional revenue was gained through sales of green and fair trade products and books and plush toys featuring the Zoo's new young orangutan, Mahal. The Warehouse Section staff was a key contributor to the revenue gained this year.

Warehouse

This Section supports: Merchandising, Group Sales, Concessions and Catering. Its primary functions include: ordering of food items, receiving of food, merchandise and other commodities, and the rotating, storing and distributing of these items. This Section also manufactures and packages all of the ice used, in addition to serving as the hub for the Zoo's recycling program. Staffed by one full-time employee, and up to eight seasonal workers, this Section makes it possible for other Zoo Divisions to accomplish their objectives.

Operating Expenses (Financials)

Zoological Department (Unaudited)

	2008 Adjusted Budget	2008 Year-to-Date	Variance () = Deficit
REVENUES			
Total Admissions	\$5,361,858	\$4,743,798	(\$618,060)
Less Group Sales	\$1,300,698	\$1,186,907	(\$113,791)
Net Operational Admissions	\$4,061,160	\$3,556,891	(\$504,269)
Concessions	\$3,440,348	\$3,644,700	\$204,352
Catering	\$150,000	\$139,801	(\$10,199)
Novelties	\$1,916,574	\$1,883,488	(\$33,086)
Parking	\$2,472,559	\$2,420,726	(\$51,833)
Sea Lion Show	\$182,018	\$148,999	(\$33,019)
Vending Machine Commissions	\$313,400	\$237,366	(\$76,034)
Strollers	\$130,000	\$114,386	(\$15,614)
Animal Rides	\$60,000	\$35,951	(\$24,049)
Total Group Sales	\$2,143,142	\$1,993,947	(\$149,195)
Carousel	\$200,000	\$163,252	(\$36,748)
SkyRide	\$250,000	\$197,888	(\$52,112)
Society Memberships	\$238,771	\$188,214	(\$50,557)
Donations	\$179,000	\$179,209	\$209
Other Private Funding	\$958,615	\$839,249	(\$119,366)
Miscellaneous Revenue	\$650,996	\$573,432	(\$77,564)
Performance Contract Escrow	\$1,490,309	\$1,490,309	\$0
Sales Tax	(\$421,051)	(\$448,079)	(\$27,028)
TOTAL REVENUES	\$18,415,841	\$17,359,729	(\$1,056,112)
EXPENDITURES			
Personnel Services	\$8,238,669	\$8,006,648	\$232,021
Fringe Benefits	\$4,355,008	\$4,355,010	(\$2)
Contractual Services	\$5,270,375	\$5,008,437	\$261,938
Internal Service Charges	\$1,925,462	\$1,932,953	(\$7,490)
Commodities	\$3,052,146	\$3,007,469	\$44,677
Depreciation	\$0	\$0	\$0
Capital Outlay	\$1,875,098	\$1,803,595	\$71,503
Other Expenditures	\$0	\$0	\$0
TOTAL EXPENDITURES	\$24,716,758	\$24,114,112	\$602,646
Less Abatements:			
Internal Charge Abatement	(\$25,000)	(\$10)	(\$24,990)
NET EXPENDITURES	\$24,691,758	\$24,114,102	\$577,656
TAX LEVY	\$6,275,917	\$6,754,373	(\$478,456)
ATTENDANCE	1,350,000	1,314,283	(35,717)

Operating Expenses

Zoo Trust Fund (Unaudited) | Railroad Trust

	2008 Adjusted Budget	2008 Actual Year-to-Date	Variance () = Deficit
REVENUES			
Zoomobile Revenue	\$80,000	\$74,714	(\$5,286)
Miniature Train Revenue	\$650,000	\$587,293	(\$62,707)
Earnings on Investments	\$26,000	\$21,351	(\$4,649)
Donations and Reserve Contribution	\$251,260	\$167,478	(\$83,782)
Other Revenue	\$107,763	\$67,584	(\$40,179)
Sales Tax	(\$39,500)	(\$31,144)	\$8,356
TOTAL REVENUES	\$1,075,523	\$887,276	(\$188,247)
EXPENDITURES			
Personnel Services	\$361,358	\$343,669	\$17,689
Fringe Benefits	\$114,588	\$90,738	\$23,850
Contractual Services	\$327,605	\$199,930	\$127,675
Internal Service Charges	\$4,526	\$4,620	(\$94)
Commodities	\$120,441	\$128,150	(\$7,709)
Conservation Projects	\$15,000	\$15,000	\$0
Capital Outlay	\$171,763	\$55,297	\$116,466
TOTAL EXPENDITURES	\$1,115,281	\$837,404	\$277,877
NET INCOME (LOSS)	(\$39,758)	\$49,872	\$89,630
Fund Balance January 1, 2008		\$436,898	
Net Income		\$49,872	
Fund Balance December 31, 2008		\$486,770	

Operating Expenses

Zoo Trust Fund (Unaudited) | Specimen Trust Fund

	2008 Adjusted Budget	2008 Actual Year-to-Date	Variance () = Deficit
EXPENDITURES			
Earnings on Investments	\$4,000	\$2,977	(\$1,023)
Animal Sales/Milk Sales	\$17,000	\$20,216	\$3,216
Giraffe Experience	\$26,235	\$26,376	\$141
Gifts & Donations	\$0	\$300	\$300
Other Miscellaneous Revenue	\$0	\$10,324	\$10,324
Reserve Contribution	\$0	\$0	\$0
TOTAL REVENUE	\$47,235	\$60,193	\$12,958
EXPENDITURES			
Contractual Services	\$34,970	\$12,169	\$22,801
Commodities	\$12,265	(\$233)	\$12,498
Internal Service Charges	\$0	\$0	\$0
TOTAL EXPENDITURES	\$47,235	\$11,936	\$35,299
NET INCOME (LOSS)	\$0	\$48,257	\$48,257
Fund Balance January 1, 2008		\$108,729	
Net Income		\$48,257	
Fund Balance December 31, 2008		\$156,986	

ZOO TRUST FUNDS			
Total Trust Revenue 2008		\$947,469	
Less Total Trust Expenditures 2008		(\$849,340)	
2008 NET INCOME (LOSS)		\$98,129	

The Milwaukee County Zoo and the Zoological Society of Milwaukee

A Public-Private Partnership | The mission of the Zoological Society of Milwaukee is to participate in conserving endangered species, to educate people about the importance of wildlife and the environment, and to support the Milwaukee County Zoo.

Zoological Society Support of the Milwaukee County Zoo

The Zoological Society of Milwaukee (ZSM) helps make the Zoo a place to love. Every year the ZSM raises funds to add something new to Zoo grounds. In May 2008, the Zoo opened a new flamingo exhibit thanks to direct cash support from the ZSM of \$703,806 (given over two years). A new entrance to the Zoo also premiered in May 2008: the U.S. Bank Gathering Place. This was the last of nine projects in a \$30.5 million public-private capital campaign, run by the ZSM with Milwaukee County, to improve the Zoo. The ZSM raised a total of \$15,513,958 since the campaign started in 2001. The ZSM's Annual Appeal, which also adds Zoo enhancements, last year brought in \$191,598 from donors for the U.S. Bank Gathering Place, for new animal-identification signs and for benches throughout Zoo grounds.

The ZSM's total Zoo support in 2007-'08 was almost \$6.3 million. That money was raised in several ways. The ZSM acquires sponsors for most of the Zoo's major events and attractions, and its 2007-'08 direct cash sponsorship support to the Zoo was \$313,133. The ZSM's animal-sponsorship program raised more than \$192,000 last year from 2,672 animal sponsors for direct support of the Zoo's animals. The ZSM also gave direct cash support of \$64,457 for the 2008 summer touring exhibit: Sting Ray & Shark Reef, sponsored by Sundance Vacations. Zoo Ball, sponsored by American Airlines & American Eagle, raised over \$514,000, and the 19th Annual MillerCoors Birdies and Eagles Golf Tournament raised over \$106,000. In all, these and other special events run by the ZSM Associate Board raised more than \$838,430. Behind the scenes, the ZSM continued to pay for maintenance contracts on 10 Zoo buildings and some equipment (\$180,270) and for veterinary and pathology residents from the University of Wisconsin-Madison to work at the Zoo (\$23,671). And the ZSM's 510 active Zoo Pride volunteers donated 37,379 hours to the Zoo and ZSM last year. The ZSM also provided graphics support through a Creative Department of five artists and promoted Zoo events and projects through ZSM publications, Web site and e-mail updates.

The Zoological Society, in a team effort with the Zoo, supported 17 conservation projects in 2007-2008, many involving Zoo staff. This was in addition to the ZSM's own international conservation projects helping birds and bonobos. And the ZSM's conservation coordinator, Dr. Gay Edwards Reinartz, continued to serve as coordinator of the Association of Zoos and Aquariums' Bonobo Species Survival Plan while also coordinating ZSM efforts in Africa to save bonobos.

The Zoological Society's Education Programs at the Zoo

Outstanding programs, an impressive education building and key support to the Zoo through providing classes and camps – these aspects of the Zoological Society's education mission drew praise in 2008. By offering extensive education programs nearly year-round, the Zoological Society helps the Zoo qualify for national accreditation by the Association of Zoos and Aquariums (AZA). That five-year accreditation was achieved in September 2008 at the AZA national convention in Milwaukee. A keynote speaker there praised the ZSM's Animal Ambassador programs, which last year reached more than 2,600 elementary-school students in 21 schools - many in economically disadvantaged neighborhoods - exposing students to careers in the sciences and to wildlife conservation. Nearly 1,200 graduated in June 2008 after learning how they and their families could help endangered wildlife. Other AZA conference attendees admired the ZSM's eight-classroom facility at the front of the Zoo and the summer camp program. The Zoological Society's 2008 camps drew nearly 12,000 participants in a record 507 camp sessions.

Summer camps: Children who normally couldn't afford to attend summer camps came to ZSM camps, thanks to support from U.S. Cellular, an anonymous donor, the Peters Foundation and Milwaukee County's Safe Alternatives for Youth fund. The ZSM served 416 children from seven neighborhood and community centers. The ZSM summer college intern program provided 20 students (including three teaching interns) hands-on job training, thanks, in part, to generous support from the Alice Kadish Foundation, the Antonia Foundation and an anonymous donor. September-May programs: The ZSM served 14,013 people in individual child or parent-child classes. During the ZSM fiscal year, 22,868 schoolchildren learned about animals and science through ZSM-run programs at the Zoo or presented at schools. An additional 112,377 schoolchildren used the Zoo as a science laboratory on field trips and had ZSM curriculum available to them during self-directed tours. Programs for schoolchildren were funded in part by gifts from the Ladish Company Foundation; U.S. Cellular; A.O. Smith Foundation, Inc.; Brady Corporation; Mortgage Guaranty Insurance Corporation; Orth Charitable Lead Trust; Posner Foundation; and Badger Meter Foundation.

In total, programs by the Zoological Society's Conservation Education Department served 182,092 people in fiscal year 2007-'08. The ZSM reached thousands more with educational messages about wildlife through a) Zoological Society programs in Africa and Belize, b) the ZSM Web site (which averages 65,000 visits a month), c) publications, d) ZSM-designed signage at the Zoo, and e) stories in the media about ZSM projects.

FINANCIAL SUMMARY

ZOOLOGICAL SOCIETY OF MILWAUKEE COUNTY (ZSM)

YEAR ENDING SEPTEMBER 30, 2008

SUPPORT & REVENUE

MEMBERSHIP DUES

from all Zoological Society
and Platypus Society members \$5,044,245

CONTRIBUTIONS

toward projects and specific programs \$852,250

SPECIAL EVENTS/PROGRAMS/ SPONSORSHIPS

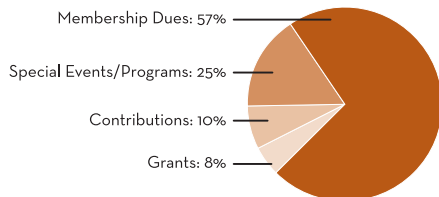
including animal sponsorship, Zoo Ball, education,
ZSM and Zoo special events and sponsorships . \$2,191,499

INTEREST INCOME \$14,847

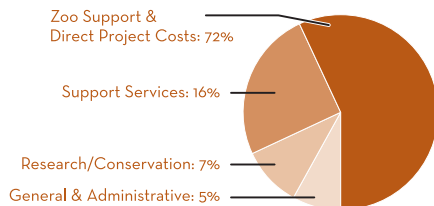
GRANTS \$736,178

**TOTAL SUPPORT
& REVENUE \$8,839,019**

RECEIPTS



EXPENSES



COST OF SUPPORT AND REVENUE (Support Services)

MEMBERSHIP DUES

Expense of providing benefits to all Zoological
Society and Platypus Society members \$845,156

SPECIAL EVENTS/PROGRAMS

Expense of providing and promoting ZSM
special events/programs \$475,143

**TOTAL COST OF SUPPORT
& REVENUE (Support Services) \$1,320,299**

EXPENSES

DIRECT PROJECT COSTS

Expenses relative to projects
and specific programs \$72,177

ZOO SUPPORT

Expense of providing, promoting and supporting education,
graphics, and conservation programs, special exhibit projects,
and ZSM and Zoo special events; reimbursing the Zoo for
all membership events; parking for Zoo Pass Plus;
and coupons \$6,122,742

RESEARCH/CONSERVATION

Expenses relating to state, national and international
programs supporting species preservation \$551,842

GENERAL AND ADMINISTRATIVE

Expenses relating to daily ZSM operations \$395,712

TOTAL EXPENSES \$7,142,473

**TOTAL COST OF SUPPORT,
REVENUE AND EXPENSES \$8,462,772**

2007-2008 SUMMARIES

ZSM CASH-FLOW SUMMARY

Cash & cash equivalents at start of the year \$628,698
Cash & cash equivalents at end of the year \$1,120,240
Net increase in cash & cash equivalents \$491,542

CAPITAL CAMPAIGN PROJECTS SUMMARY

Revenue 2007-2008 \$254,196
Expenses for U.S. Bank Gathering Place new
Zoo entryway (current & reserve funds used) \$5,216,519



Milwaukee County Executive
Scott Walker

Milwaukee County Board Chairman
Lee Holloway 5th District

Vice Chair
Michael Mayo, Sr. 7th District

Board of Supervisors

Mark A. Borkowski	11th District
Gerry Broderick	3rd District
Paul Cesarz	9th District
Toni Clark	2nd District
Elizabeth Coggs	10th District
Lynne De Bruin	15th District
Marina Dimitrijevic	4th District
Willie Johnson, Jr.	13th District
Patricia Jursik	8th District
Christopher Larson	14th District
Theo Lipscomb	1st District
Joseph A. Rice	6th District
Joe Sanfelippo	17th District
Jim Schmitt	19th District
Johnny Thomas	18th District
John F. Weishan, Jr.	16th District
Peggy West	12th District

The Milwaukee County Zoo offers equal opportunities for employees and visitors alike.

Editor: Jennifer Diliberti-Shea
Designer: Roberta L Weldon
Photographer: Michael Nepper





Milwaukee
County
ZOO

10001 W. Blue Mound Rd., Milwaukee, WI 53226
414-771-3040 • www.milwaukeezoo.org

ZOOLOGICAL SOCIETY OF MILWAUKEE



• CONSERVE • EDUCATE • SUPPORT •

ASSOCIATION
OF ZOOS &
AQUARIUMS



World Association of
Zoos and Aquariums



Conservation Breeding
Specialist Group



ISIS

International Species
Information System

Zoological Information Management System

