Best Zoos in the Midwest

An Honors Thesis (HONRS 499)

by

Angela M. Miller

Thesis Advisor
Dr. Darlene Mathis-Eddy

Ball State University
Muncie, Indiana

Date: May 1997
Expected Date of Graduation: May 10, 1997
Purpose of Thesis

This creative project provides information regarding the major zoological institutions in the Midwest region. Personal information about zoos, zoo history and a current look at zoos are also included. Along with basic information about zoos, illustrations were also created to complete this project. The illustrations were included to assemble this project like a book rather than a typical research thesis. The purpose of this project is to provide a better understanding of zoological institutions and to introduce fundamental information about the major zoos in this geographical region.
# Table of Contents

Acknowledgments 2
Preface 3
Introduction 6
Brookfield Zoo 9
Cincinnati Zoo and Botanical Garden 11
Cleveland Metroparks Zoo 13
Columbus Zoo 15
Detroit Zoological Park 17
Indianapolis Zoo 19
Knoxville Zoological Gardens 21
Lincoln Park Zoo 23
Louisville Zoological Garden 25
Memphis Zoo 27
Milwaukee County Zoo 29
The Toledo Zoo 31
Conclusions 32
Bibliography 34
Acknowledgments

I would like to dedicate this project to my husband Ryan, my mother Angie and my brother Stuart for their support during this time consuming endeavor.

Dr. Darlene Mathis-Eddy was invaluable in her guidance with ideas and revision. Her exceptional assistance and encouragement was crucial throughout this project.

Throughout this book, I relied on up to date information gained directly from the zoos. I would like to thank all of the zoos listed in this book. Each zoo was extremely supportive in providing information. Especially, I would like to thank the Louisville Zoo, who in addition to the pertinent information, sent me a colorful photo of their newest exhibit, Islands. The Memphis Zoo also sent me the information I requested along with an exquisite peacock feather. I was very impressed by how professionally each zoo responded to my requests. The information that they provided was extremely relevant and valuable to my project.
Preface

I have been fascinated and enchanted by nature since I was a child. I have always been interested in all types of animals. On my first visit to a zoo as a young child, in the pictures I appear to be intrigued by a monkey that I was holding hands with. As a three year-old, I had a "pet" worm that lived in my yard. When I was four, I found a baby bird that had fallen out of our tree and I convinced my mother that we had to help the bird.

Later, in Florida, I became intrigued by many reptiles including snakes, iguanas, chameleons, alligators and turtles. I became particularly curious about snakes and a friend and I would often go "snake hunting". We would try to locate and catch the snakes so that we could get to view them up close. We were bitten several times, but had lots of fun on our expeditions. We often found and handled many safe species including garter snakes, hognose snakes, rat snakes, water snakes, ribbon snakes and black racers. The black racer was my favorite because it was so fast that we never could catch one. Several times we ran into some dangerous species including a water moccasin and a rattlesnake. We learned a great deal about habitats, handling wild animals and species identification. At the same time, a group of sandhill cranes lived in an isolated marsh near my house. I would often observe the cranes and record their behavior. Sandhill cranes are very reclusive birds and do not like to be watched.

My 7th grade biology teacher, Mr. Watson, helped me realize how important biology was to me personally. He influenced my desire to pursue a profession in the field of biology. I thought I wanted to work at a zoo, so I participated in a week long day camp at Busch Gardens. We participated in many events, and we were allowed to perform some of the duties of a zookeeper. I fed giraffes on the open veldt, and I watched the birth of giraffe. I was captivated by how quickly the baby giraffe could stand. We learned how to search for baby gazelles on the veldt. We were allowed to watch the lions being fed. We also watched koalas, which sleep almost the entire day, eat eucalyptus
leaves in their exhibit. I got to touch a rhino who had very rough, sand covered skin. We also assisted in feeding the Bengal tigers and visited the baby animal nursery. We learned about many aspects of the zoo, and we rated each exhibit at the zoo. We tried to determine if the exhibit was similar to the natural habitat of the animal, and we questioned how easily each exhibit could be maintained. The camp at Busch Gardens, one of the most rewarding activities I have ever participated in, further motivated my desire to become a zoo keeper.

I have tried to learn as much about animals as I could by reading numerous books and by watching scientific programs. In high school, I took every biology class that I could and decided to major in biology during college. I have taken over 15 biology classes at Ball State, and I will be a zoo keeper after graduation. I am currently a volunteer at the Indianapolis Zoo. I assist the keeper of the African lion, Guinea baboon and African wild dog exhibits. On a typical day, we clean the outside exhibit, check the security of the wires/mesh and drain and refill the water pools. We then feed some of the animals and release them into their exhibits. Next, we clean and disinfect the inside holding areas. Diets are prepared and the daily activities are recorded. Enrichment activities are incorporated into the routine. Enrichment activities are designed to make the animals life richer or more interesting. For example, one morning dozens of bagels were placed in the baboon yard. Some of the bagels were placed on trees, shoved into crevices, placed in the mesh and scattered about the yard. The baboons loved the bagels and this activity used their abilities to search for food. Keepers may also write articles for newsletters, give interviews to local news stations, participate in educational presentations with visitors, and research any special projects that they are working on. Occasionally, the keeper must also assist veterinarians during medical procedures and exams with the animals. Observation of animal behavior and physical condition is also a critical duty of a keeper.
Since I have such a strong interest in zoological institutions, I wanted to work on a thesis project that was directly related to zoos. I have compiled a list of the major zoos in the Midwestern region of the United States. I have provided information that was given to me directly from the zoos along with research on zoos from other sources. I hope that this project will provide you with a better understanding of many aspects of zoos.
Introduction

Throughout the world, more than 350 million people visit zoos each year. "Zoos along with aquariums and game parks, are one of the greatest potential tools available to society to alter the attitudes of a significant proportion of mankind, to create a deep-seated awareness that we are not rightfully the overlords of this planet but share it with a vast and beautiful array of life forms, each with intrinsic merit. With the proper attention to a conservation message and ethic in its exhibits, zoos of the world have the opportunity to help create almost a quarter of a billion new conservationists each year, and they are beginning to take on the task." (Page, pg. 159)

Although the issue of captive animals in zoos is still a controversial topic, most zoos have made significant improvements over the original "zoological collections". The first collections of rare animals was believed to have occurred before 2,000 B. C. and "were founded exclusively for the enjoyment of the wealthy." (Yancey, pg. 13) During this time, in many spectacles throughout Rome, as a form of entertainment, animals such as lions and bears were often pitted against one another to fight until death. In the early eighteenth century, the first publicly displayed collections of animals and plants occurred. Many zoos of this time wanted "to study captive animals in order to better understand their wild relatives." (Koebner, pg. 61) The first zoo in the United States, New York City's Central Park Zoo, opened in 1864. Animals were usually kept alone or in very small groups and were grouped by relation according to the classification system rather than by habitat type. For example, all monkeys were kept in the same area rather than all of the animals that might live in a rainforest being grouped together. The animals during this period were often kept in tiled, indoor, artificially lighted cages with cement floors. The cages were completely empty and provided no stimulus for the animals. Breeding within zoos was rarely implemented as zoos often replaced animals that died with new animals from the wild.
The first natural habitat zoo, The Carl Hagenbeck Tierpark, located in Germany, opened in 1907. Moats were created to separate animal groups and ensure their safety. Visitors were awestruck and amazed by the natural setting. "Virtually all cages and bars had been removed. Pens were open-air whenever possible. Sunshine, water, and grass replaced the dark, dirty surroundings that visitors had tolerated before. Animals were grouped by habitat and lived much as they would in the wild." (Yancey, pg 24-25) Several zoos tried to incorporate this concept, but many zoos still had barred, boxlike exhibits where animals were uncomfortable, neglected, or mistreated.

By the 1970's, zoos began changing their exhibits to ensure the comfort and well-being of the animals. Natural habitats that reflect an authentic wild habitat are currently found in most zoos. An exhibit can be described as the surroundings where an animal is kept which resembles the natural habitat of that animal. Moats, trenches, waterways, glass and free flight cages are all methods used in creating a naturalistic exhibit.

Animal behavior in captivity is often closely studied to learn how the animals act in the wild and to make better decisions about their care in captivity. Behavioral enrichment is used to combat the problems of boredom and psychological stress that may occur in captivity. These enrichment activities must try to enhance or duplicate a behavior that may normally occur in the wild. Trying to have animals fetch a ball or jump over a fence are not activities that they would likely use in the wild. For African wild dogs, enrichment activities often utilize their excellent sense of smell. Small chunks of meat or bones are hidden within their exhibit. The dogs very quickly recover the hidden food. An activity like this demonstrates an activity that would take place in the wild. Diet and social requirements must also be considered when making decisions about animals. Certain animals are group or pack animals. For instance, baboons stay together in a troop, but within the troop there may also be distinct groups. These groups look out for one another, groom one another, eat together, and typically spend most of the day together. The social behavior that occurs between the baboons is extremely important.
Keepers can often tell that something is wrong by observing the interactions between the animals.

Getting animals to reproduce in captivity has proved to be no easy task. Many specialized methods are utilized when breeding animals that are difficult to breed in captivity. Artificial insemination, fertility drugs, embryo transplants and in vitro fertilization are extremely variable, complicated processes with captive animal species. Each species and sometimes even individual animals react differently to these processes. Embryo transplants allow embryos of rarer animals to be placed into the womb of a similar, yet more common animal. In vitro fertilization is the process by which an egg is fertilized in a test tube and then replaced in the womb of either the original mother or a surrogate. Further research in this area is vital to better understanding of these techniques as applied to individual captive animal species. These techniques are essential to increased genetic variation of endangered and threatened species. Maintaining genetic variation is crucial for a healthy population. These techniques are also used to increase the chances of viable offspring. Without some of these techniques, some species would be much closer to extinction.

Current zoos are exhibiting animals in very natural appearing settings that also makes the animals more comfortable. Animals are grouped together by habitat type as they might appear in the wild. Exhibits are no longer empty and provide lots of stimulation for the animals. Enrichment, diet and social requirements are important considerations in zoos today. Breeding in captivity is also a vital, yet complicated process.
Brookfield Zoo

Chicago Zoological Society
3300 Golf Road
Brookfield, IL 60513
(708)485-0263

Brookfield Zoo is home to 2,500 animals representing more than 400 species. Exotic landscapes including an arid African grassland and a steamy tropical rain forest are a few of the prominent features here. Many of the exhibits include educational opportunities and hands on experiences.

"The mission of the Chicago Zoological Society is to help people develop a sustainable and harmonious relationship with nature. In doing so, the Society shall provide for the recreation and education of the people, the conservation of wildlife, and the discovery of biological knowledge." (Brookfield Zoo Map, 1996)

HOURS:  
Memorial Day - Labor Day: 9:30 a.m.-5:30 p.m.  
Labor Day - Memorial Day: 10 a.m.-4:30 p.m.

ADMISSION:  
Adults $4.00  
Seniors (66+) $1.50  
Children 3-11 $1.50  
Children under 2 Free

MAJOR ATTRACTIONS:

Children's Zoo  
Raccoons, foxes, ducks, and geese are a few examples of the animals that can be viewed in this exhibit. The petting area includes llamas, goats, and cows.

The Fragile Kingdom  
Outside exhibits feature lions, tigers, snow leopards, jaguars, and other leopards. Fishing cats, naked mole rats, rock hyraxes, fennec foxes, and small clawed otters are some the animals that can be viewed in an African desert and Asian rain forest.

Habitat Africa!  
Visit a waterhole, kopje, and a park ranger's office while viewing giraffes, African wild dogs, zebras, topi antelope and more.
Seven Seas
Sea lions, harbor seals, and a walrus are housed in an outdoor Seascape exhibit which represents the shores of the Pacific Northwest. Dolphins and other marine mammals can also be seen.

The Swamp
Alligators, otters, and free-flying birds are showcased in the Illinois river habitat and cypress swamp. This is an educational attraction that allows visitors to learn how wetlands benefit people and ways in which they can help save these ecosystems.

Tropic World: A Primate's Journey
View primates, animals, and birds that share this rain forest while walking the rain forest treetops, viewing orangutans from a hot air balloon and more.

OTHER ATTRACTIONS:

Aardvarks  Camels  Indian Lake Trail
Aquatic Birds  Discovery Center  Pachyderm House
Australia House  Grant's Zebras  Perching Birds
Baboon Island  Grevy's Zebras  Reptile House
Bear Grottos  Hoofed Animals  Small Mammal House
Be a Bird  Ibex Island  Wolf Woods
Cincinnati Zoo and Botanical Garden

3400 Vine Street
Cincinnati, OH 45220-1399 (513) 281-4701

The Cincinnati Zoo was established in 1873 and is the second oldest zoo in the United States. The 72-acre complex is home to 700 species of animals and 1,400 species of plants.

"The Cincinnati Zoo and Botanical Garden is committed to the understanding and preservation of wildlife and our living world through naturalistic exhibits of animals and plants, scientific research, education, and active cooperation with a worldwide network of conservation organizations." (Wildlife Explorer, July 1996)

HOURS:
Winter: 9 a.m.-6 p.m. (park closes at 8 p.m.)
Summer: 9 a.m.-5 p.m. (park closes at dusk)

ADMISSION:
Adults $8.00  Children 2-12  $4.50
Seniors $5.75  Children under 2  Free
Parking $4.50

MAJOR ATTRACTIONS:

African Veldt
Home mainly to large hoofed mammals and birds including Damara's zebra, giant eland, bongo, cheetah, Indian rhino, yellow-backed duiker, black rhinoceros, crowned cranes, maribou storks, and ostriches.

Big Cat Canyon
In this exhibit, white Bengal tigers are showcased in a natural setting.

Cat Grottos
Indo-Chinese tigers, African wild dogs, and African lions are all featured in this area.

Cat House
Sixteen different species of cats including the clouded leopard, mountain lion, snow leopard, and several small exotic cats are housed in this building.

Elephant House
This National Historic Landmark exhibits elephants, giraffes, hippos, Indian rhinos, and okapi.
Gorilla World
Colobus monkeys, lowland gorillas, crowned guenons, and aardwolves are featured in this exhibit.

Insect World
Hercules beetles, Royal Goliath beetles, Giant Southeastern Walking Sticks, Harlequin beetles, many butterflies, and naked mole rats are all housed in the largest building in North America devoted to insects.

Jungle Trails
A rain forest teeming with rare and exotic wildlife from Asia and Africa features bonobo chimpanzees, silver leaf monkeys, gibbons, shoebill storks, lion-tailed macaques, orangutans, horn bills, diana monkeys, and slow loris.

Monkey Island
A rock island surrounded by a moat is home to Markhor goats, Japanese macaques, snow monkeys, and California sea lions.

Nocturnal House
The activities of many nocturnal animals can be viewed here including aardvarks, fennec foxes, barn owls, and many species of bat (including the vampire bat).

Children's Zoo
A Zoolab, Children's Forest, nursery, barnyard, and the Woodland flight cage are located here. This exhibit is home to rare cousins of common barnyard animals and also includes grey foxes, penguins, prairie dogs, tasmanian devils, walrus and more.

Wildlife Canyon
Anoas, barbirusa, Bactrian camels, gazelles, pudu, red river hogs, Sumatran rhinos, and zebra duikers are all highlighted in this exhibit.

Wings of the World
Many rare birds including puffins, auklet, king penguins and more are showcased here.

OTHER ATTRACTIONS:

Aquarium
Bear line
Botanical Center
CREW(Center for Reproduction of Endangered Wildlife) Eagle Eyrie
Gibbon Islands
Komodo dragon
Reptile house
Oriental Garden
Passenger Pigeon Memorial
Red panda
CLEVELAND METROPARKS ZOO

3900 Brookside Park Drive
Cleveland, OH 44109
(216) 661-6500

The Cleveland Metroparks Zoo occupies 165 acres, houses 3,300 animals, and is the seventh oldest zoo in the United States.

"The mission of Cleveland Metroparks Zoo is to improve the future for Wildlife by exhibiting animals and plants and providing education and conservation programs which encourage respect and stewardship of the natural world and a better understanding of our place within it." (Zoo Fact Sheet)

HOURS:

<table>
<thead>
<tr>
<th></th>
<th>Zoo Grounds:</th>
<th>Summer weekends:</th>
<th>The RainForest:</th>
<th>Wednesdays:</th>
<th>Closed: Christmas and New Year's Day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 a.m.-5 p.m.</td>
<td>open until 7 p.m.</td>
<td>10 a.m.-5 p.m.</td>
<td>open until 9 p.m.</td>
<td></td>
</tr>
</tbody>
</table>

ADMISSION:

<table>
<thead>
<tr>
<th></th>
<th>Zoo Only</th>
<th>Zoo &amp; RainForest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>$5.00</td>
<td>Adults</td>
</tr>
<tr>
<td>Children 2-11</td>
<td>$3.00</td>
<td>Children 2-11</td>
</tr>
<tr>
<td>Children under 2</td>
<td>Free</td>
<td>Children under 2</td>
</tr>
</tbody>
</table>

MAJOR ATTRACTIONS:

The RainForest

This unique 2-acre exhibit contains more than 600 animals and 7000 plants from the jungles of Africa, Asia, and South America on two levels. We will begin on the lower level. The Jungle Cascade is a spectacular 25-foot waterfall that greets you as you enter the ancient Mesoamerican temple ruins and dense foliage. Jewels of the Jungle exhibits butterflies circling a giant kapok tree. Look for the zebra butterflies fluttering about. Jungle Giant - the kapok tree is one of the largest rain forest trees, growing to 200 feet. Inside of the tree is a spiral staircase leading to the upper level. The Scientist's Hut is designed to simulate a research outpost in Borneo. The Bornean Orangutan exhibit houses many trees to accommodate the orangutans living here. Reptiles Galore showcases green tree pythons, red tomato frogs, Matamata turtles and more. The Video Theatre is a great place to catch your breath and shows short education videos about the rain forest ecosystem. Finally, the Tropical Rain Storm is wet, experience an actual storm including thunder, lightning, and torrential rain that repeats every twelve minutes. Check out the six-foot long water monitor lizards that live here.
African Plains
Ostriches, zebras, one of the largest herds of Masai giraffes, and other species indigenous to Africa are displayed in this exhibit.

Birds of the World
Indoor and outdoor aviaries showcase over 300 birds from all seven continents.

Greenhouse
Over 300 plants are on display here.

Northern Trek
Many cold climate species such as polar and grizzly bears, Siberian tigers, Bactrian camels, Thorold's deer, and reindeer are located in this exhibit.

Primate, Cat & Aquatics Building
A wide variety of animals including red pandas, snow leopards, gorillas, chimpanzees, marmosets, and 35 aquatic life forms including sharks, piranhas, sting rays, and living corals are on exhibit in this building.

Rhino/Cheetah Exhibit
This is the only exhibit in the United States where cheetahs and rhinos are together in the same enclosure.

OTHER ATTRACTIONS:

<table>
<thead>
<tr>
<th>Aldabra tortoises</th>
<th>Children's farm</th>
<th>Monkey Island</th>
<th>Tigers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds of Prey</td>
<td>Harbor seals</td>
<td>Pachyderm Building</td>
<td></td>
</tr>
<tr>
<td>Bears</td>
<td>Flamingos</td>
<td>Primate Islands</td>
<td></td>
</tr>
<tr>
<td>Bongos</td>
<td>Lions</td>
<td>Sea Lions</td>
<td></td>
</tr>
</tbody>
</table>
COLUMBUS ZOO

9990 Riverside Drive 1-800-MONKEYS
Powell, OH 43065 (614) 645-3400

The Columbus Zoo covers 404 acres along the banks of the Scioto River and is home to more than 700 species and 11,000 specimens. The mission of the Columbus Zoo is "to promote awareness and understanding of the interdependence of the natural world, and to present to our community, interactive, participatory, and educational exhibits and activities, which represent that relationship. The Zoo shall achieve its mission by teaching and practicing conservation, both on and off-site, contributing to the discovery of biological knowledge, offering enjoyable, educational and family-oriented recreational opportunities, and instilling in all who visit a sense of thrill and adventure."

HOURS: Memorial Day-Labor Day: 9 a.m. - 6 p.m.
Wednesdays close at 8 p.m.
Labor Day-Memorial Day: 9 a.m. - 5 p.m.
Visitors may stay one hour after closing.

ADMISSION: Adults $5.00 Children 2-11 $3.00
Seniors (60+) $3.00 Children under 2 Free

MAJOR ATTRACTIONS:

Aquatic Complex
A tide pool, fish, sharks, amphibians, sea turtles, and Lake Victorian cichlids are showcased here.

Arthropods/Tropical Garden
In this exhibit, naked mole rats, scorpions, and more are displayed.

Australia
Bennett's wallaby, koala, monkeys, red pandas, and kangaroos are on exhibit in this area.

Herbivore/Carnivore
This building represents a predator/prey environment by displaying large cats overlooking bongos, nilgais, giraffes, zebras, and more.

Kid's Zoo
A petting barn, pony rides, small primates, and Exploration Theatre are included here.
North America
This exhibit features animals that roam this continent including: bears, bison, pronghorns, timber wolves, bobcats, cougars, moose, wolverines, bald eagles, otters, and Mexican wolves. Banded killifish are also included in the wetlands area.

Pachyderms
Elephants, rhinoceros, tapirs, and warthogs are housed here.

Reptiles
Alligators, lizards, snakes, turtles, and a black water monitor can be viewed in this unique environment.

West Africa
Bonobos and gorillas are currently on exhibit, but look for more when construction of this area is complete.
DETROIT ZOOLOGICAL PARK

8450 West Ten Mile Road  
Royal Oak, MI 48068  
(810) 398-0900  
Royal Oak, MI 48068  
(810) 398-0903

The Detroit Zoo, which is only one part of the Detroit Zoological Institute, has 125 acres and exhibits 1,300 animals.

"The mission of the Detroit Zoological Institute is to stimulate interest in and to motivate stewardship for all creatures of our planet through: conservation education, promoting respect, appreciation, and ethical attitudes toward wildlife; collaboration with field conservationists in proactive international programs for the survival of endangered species; and enriching experiences of discovery as well as recreation." (Background Information, December 1995)

HOURS:  
November - March: 10 a.m. - 4 p.m.  
April - October: 10 a.m. - 5 p.m.  
Closed: Thanksgiving, Christmas, New Year's Day

ADMISSION:  
Adults $6.00  
Seniors 62+ $4.00  
Children 2-12 $3.00  
Children under 2 Free  
Parking $3.00

MAJOR ATTRACTIONS:

Bear Exhibits  
Polar bears, grizzlies, and sloth bears can be viewed in these dens.

Elephants and Rhinos  
Indoor and outdoor viewing is available, and several African birds are also on exhibit.

Farmyard  
All of the farmyard favorites can be viewed here.

Great Apes of Harambee  
Natural habitats and scenic overlooks are home to chimpanzees.

Holden Museum of Living Reptiles and Amphibians  
Snakes, turtles, lizards, crocodiles, frogs, and salamanders are showcased in this building.
Penguinarium
Penguins can be viewed in three habitats and a glass-sided circular pool also allows underwater viewing. King, macaroni, rockhopper, and blue penguin species are exhibited.

Rackham Fountain
A larger-than-life-sized bronze sculpture of two bears is featured in this fountain.

Walk-through Aviary
30 species of birds live in this lush tropical environment complete with a waterfall, stream, and pond.

Wildlife Interpretive Gallery.
This building houses a spectacular enclosed butterfly and hummingbird garden. This facility provides a multi-sensory experience designed to help visitors understand, appreciate, and celebrate wildlife. The gallery includes a coral reef aquarium, interactive displays, a wildlife art gallery, and a theater that features eight short films.

OTHER ATTRACTIONS:

<table>
<thead>
<tr>
<th>African mammals</th>
<th>Carnivores</th>
<th>Log Cabin Learning Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>African waterhole</td>
<td>Giraffes</td>
<td>Mandrills</td>
</tr>
<tr>
<td>Alligators</td>
<td>Hippo House</td>
<td>Prairie Dogs</td>
</tr>
<tr>
<td>Asian Hoofstock</td>
<td>Island Lake</td>
<td>Primate House</td>
</tr>
<tr>
<td>Backyards for Wildlife</td>
<td>Kangaroos</td>
<td>Seals and sea lions</td>
</tr>
<tr>
<td>Camels</td>
<td>Lions</td>
<td>Small mammals</td>
</tr>
</tbody>
</table>
INDIANAPOLIS ZOO

1200 West Washington Street (317) 630-2001
Indianapolis, IN 46222 (317) 630-2030

The Indianapolis Zoo is relatively new. Although the original zoo was built in the 1960's, the current location of the zoo opened in the summer of 1988. The Indianapolis Zoo is one of very few zoos in the United States that is entirely self-supporting, meaning that operating funds are derived from admissions, concessions, memberships and special donations.

"The mission of the Indianapolis Zoological Society, Inc. is to provide recreational learning experiences for the citizens of Indiana through the exhibition and presentation of elements of natural environments in a way to foster a sense of discovery, stewardship and the need to preserve the earth's plants and animals. Plants, animals, and people are all part of a web of life that ties together all living things on the planet. Our knowledge about these complex interrelationships is limited, but essential to understanding the consequences of our actions."

**HOURS:**
- 9 a.m. - 4 p.m.
- Closed: Christmas, New Year's Day

**ADMISSION:**
- Adults $9.00
- Seniors 62+ $6.50
- Parking $3.00
- Children 3-12 $5.50
- Children under 2 Free
- Community Morning

$3.00(Parking Free).

**November-February**
- Adults $5.00
- Seniors 62+ $3.50
- Children 3-12 $3.50
- Children under 2 Free

**MAJOR ATTRACTIONS:**

**African Plains**
- Elephants, giraffes, gazelles, kudu, zebra, lions, African wild dogs, baboons, ostriches, vultures, African crowned cranes and much more are exhibited in this area.

**Australian Plains**
- Wallabies, kangaroo, emu, and many birds can be seen up close and personal. Watch out for a wallaby that might hop right by you. This open concept exhibit allows you to be very close to several animal species.
Deserts
    Inside of this exhibit you might find an iguana, turtle or other reptile, as well as many different birds.

Encounters
    A petting zoo and many interactive exhibits make this a very popular area. Search out what animals are probably in your backyard in one of the exhibits in this building.

Forests
    A bald eagle, kodiak bears, tigers, golden lion tamarans, and maques make this area interesting.

Waters
    Sharks, many fish species, octopus, anemones, starfish, lobster, and chambered nautilus are featured in the first section of this exhibit. Enter a tropical rainforest that houses crocodiles, alligators, an emerald tree boa, an anaconda, turtles, fish, and birds. An eel, penguins, puffins, egrets, and scarlet ibis are also featured. A large frog exhibit is especially unique and enjoyable.

OTHER ATTRACTIONS:

The Commons  Polar Bears
Camels        Sea Lions
Dolphins      Seals
KNOXVILLE ZOOLOGICAL GARDENS

3333 Woodbine Avenue
Knoxville, TN 37914
(423)637-5331

The Knoxville Zoological Gardens houses 880 animals of 220 different species on 54 acres.

"The mission of the Knoxville Zoological Gardens is to enhance appreciation of the Earth’s natural heritage by providing for the conservation of wildlife and the discovery of biological knowledge and for the recreation and education of zoo visitors." (Knoxville Zoo Map)

HOURS:  Yearround:  10 a.m. - 4:30 p.m.

ADMISSION:  Adults $6.95  Children 3-12 $3.95
Seniors 62+ $3.95  Children under 3 Free

MAJOR ATTRACTIONS:

African Forest
Chimpanzees, nyalas, and lowland gorillas can be viewed in this area.

African Plains
Kudus, elands, Marabou storks, warthogs, ostriches, zebras, and giraffes can be viewed from this African area.

Big Cat Country
Cheetahs, lions, white tigers, mountain lions, lynxes, binturongs, hyenas, nilgiri tahr, and snow leopards abound in this exhibit.

Birds of Central America
A winding boardwalk leads through marshes filled with whistling ducks, roseate spoonbills, and boat-billed herons.

Gorilla Valley
Silverback gorillas live in this naturalistic habitat complete with a waterfall, tropical plants, and massive rockwork.

The North American River Otter Exhibit
Prepare to view energetic otters underwater in this exhibit.
Penguin Rock
African penguins are viewed through panoramic glass here.

Tortoise Territory
Aldabra tortoises and several smaller species are featured in this exhibit.

OTHER ATTRACTIONS:

- Andean condor
- Baboons
- Bald Eagles
- Black bears
- Bog turtles
- Children's Zoo
- Elephants
- Kookaburras
- Marine animals
- Red pandas
- Red wolves
- River Otters
- Snowy owls
- Tragopans
- Toucans
- Turtle marsh
- Waterfowl pond
- White rhinos
LINCOLN PARK ZOO

2200 North Cannon Drive
Chicago, IL  60614

(312) 742-2000

The Lincoln Park Zoo, located in the heart of Chicago, is home to more than 1,000 animals. "The mission of the Lincoln Park Zoo is to teach the public about wildlife and its importance in the natural world and through public and school based programming conducted independently and in partnership with other institutions, to foster a sense of stewardship for the environment; to participate with other institutions in cooperative programs that advance the husbandry, medical care and captive management of endangered species, especially those represented in the Zoo's collection; to support national and international conservation initiatives engaged in the scientific study of threatened and endangered species, both through Zoo-based programs and substantial in situ commitments; to provide a free, landscaped oasis in the heart of the city where exotic and native animals are thoughtfully exhibited for the education and enjoyment of all visitors."

HOURS: 9 a.m.-5 p.m.
Opens at 8 a.m.

ADMISSION: Free!
Parking $5

MAJOR ATTRACTIONS:

Farm-in-the-Zoo
A working Midwestern farm houses cows, pigs, chickens, and horses in this five-acre exhibit.

Kovler Lion House
Leopards, cheetahs, and tigers are on exhibit in this building.

Lester E. Fisher Great Ape House
Western lowland gorillas, orangutans, and chimpanzees are being showcased in this exhibit.

McCormick Bird House
Seashores, wetlands, and a lush tropical free flight area provide a natural habitat for birds from around the world.

Pritzker Children's Zoo
This area includes a zoo nursery and a conservation station.
**OTHER EXHIBITS:**

<table>
<thead>
<tr>
<th>Antelope &amp; Zebra Area</th>
<th>McCormick Bear &amp; Wolf habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blum/Kolver Penguin &amp; Seabird House</td>
<td>Mexican wolves</td>
</tr>
<tr>
<td>Conservatory</td>
<td>Regenstein Birds of Prey Exhibit</td>
</tr>
<tr>
<td>Crown-Field Center</td>
<td>Regenstein Large Mammal Area</td>
</tr>
<tr>
<td>Formal Gardens</td>
<td>Sea Lion Pool</td>
</tr>
<tr>
<td>Helen Branch Primate House</td>
<td>South Lagoon</td>
</tr>
</tbody>
</table>
LOUISVILLE ZOOLOGICAL GARDEN

1100 Trevilian Way
Louisville, KY 40213
(502) 459-2181

The Louisville Zoo encompasses 133 acres and displays over 1200 animals.

**HOURS:**
- September - March: 10 a.m. - 4 p.m.
- April - August: 10 a.m. - 5 p.m.
- June - August (Wed. - Fri.) Open until 8 p.m.
- Closed: Thanksgiving, Christmas, and New Year's Day

**ADMISSION:**
- Adults: $5.50
- Children 3-11: $2.75
- Seniors 61+: $3.50
- Children under 2: Free

**MAJOR ATTRACTIONS:**

**Islands**
This new exhibit creates an Indonesian village and encourages visitors to explore islands as ecological treasures and to understand why the species that live on islands are vulnerable. A hillside trail, village, Balinese split gates, waterfall, and bamboo forest are a few of the highlights of this exhibit. The following animals can be viewed here: Sumatran tigers, island orangutans, Siamang apes, Malayan tapirs, Babirusa pigs, Aldabra tortoises, and black footed penguins. Komodo dragons, Cuban crocodiles, Humboldt penguins, fishing cats, fruit bats, and several rare birds will be added to this exhibit in 1997.

**African Veldt Panorama**
Many African animals including Addaxes, Blesboks, camels, cheetahs, kudus, lions, and zebra are featured in this exhibit.

**HerpAquarium**
Crocodiles, birds, and many amphibians will surround you in this exhibit, which recreates the world's of water, desert, and a rain forest within one building.

**MetaZoo**
Hands-on displays and exhibits offer a close look at the animal world. Do not miss the rare Black-footed ferret exhibit.
OTHER ATTRACTIONS:

American wild cats  Flamingos  Monkey Island  Sables
Arachnids          Giraffes       Otters       Seals
Asian Plains        Guanacos      Pere David deers  Sea lions
Australian Walkabout Jaguars Lemurs   Polar bears  Tigers
Elephants           Maned wolves  Rheas        Wart hogs
MEMPHIS ZOO

Overton Park
2000 Galloway
Memphis, TN 38112
(901) 276-WILD

The Memphis Zoo has over 400 species of mammals, birds, reptiles, amphibians, fish and insects from every part of the planet.

"The Memphis Zoo is dedicated to conservation and education; committed to providing a clean, entertaining sanctuary for plants, animals and people."
(ExZoobenance, Summer 1996)

HOURS:

March - October: 9 a.m. - 6 p.m.
free admission Mondays 3:30 to close
October - February: 9 a.m. - 5 p.m.
free admission Mondays 3 to close
May 31 - September 1: Friday-Sunday open until 9 p.m.

Closed: Thanksgiving, Christmas Eve and Christmas

ADMISSION:

Adults $6.00  Children 2-11 $4.00
Seniors 60+ $5.00  Children under 2 Free

MAJOR ATTRACTIONS:

Animals of the Night
Forty species of nocturnal animals from Africa, Asia, Australia, and the Americas are on display in this exhibit.

Cat Country
Both predators and prey are on exhibit in this 4-acre outdoor area. The following can be seen: African lion, cheetah, caracal, lynx, kilipspringer antelope, jaguarundi, rock hyrax, crested screamer, jaguar, capybara, snow leopard, clouded leopard, Sumatran tiger, and fishing cats.

Once Upon a Farm
This is a domesticated animal exhibit that features 19th century farm life including crops, barns, a gristmill, a waterwheel, a windmill, a chicken coop, and more. The following animals are on display: horses, pigs, sheep, cattle, chickens, and prairie dogs.
**Primate Canyon**
Ten species of primates, interactive play areas for children, an Oriental pagoda, and an African fishing village are the highlights of this exhibit.

**OTHER ATTRACTIONS:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Chamois Mountain</th>
<th>Hippos</th>
<th>Round Barn</th>
</tr>
</thead>
<tbody>
<tr>
<td>African hooved animals</td>
<td>Discovery Center</td>
<td>Meerkats</td>
<td>Sea lions</td>
</tr>
<tr>
<td>African veldt</td>
<td>Elephants</td>
<td>Penguins</td>
<td>Tapirs</td>
</tr>
<tr>
<td>Aquarium</td>
<td>Giraffes</td>
<td>Reptiles</td>
<td>Tropical Birds</td>
</tr>
<tr>
<td>Asian hooved animals</td>
<td>Hatchery</td>
<td>Rhinos</td>
<td></td>
</tr>
<tr>
<td>Bears</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterfowl</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MILWAUKEE COUNTY ZOO

10001 West Bluemound Road       (414) 771-3040
Milwaukee, WI

The Milwaukee County Zoo contains 2,500 species to exhibit on 200 acres of land.

"The mission of the Milwaukee County Zoo is to inspire public understanding, support and participation in global conservation of animal species and their natural environment by creating a unifying bonding between our visitors and the living earth."
(Zoo Fact Sheet, February 1996)

HOURS:
May - September: 9 a.m. - 5 p.m.
Sundays/holidays open until 6 p.m.
October - April: 9 a.m. - 4:30 p.m.

ADMISSION:

<table>
<thead>
<tr>
<th>November - March</th>
<th>April - October</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>Adults</td>
</tr>
<tr>
<td>$6.00</td>
<td>$7.50</td>
</tr>
<tr>
<td>Seniors 60+</td>
<td>Seniors 60+</td>
</tr>
<tr>
<td>$4.50</td>
<td>$6.50</td>
</tr>
<tr>
<td>Children 3-12</td>
<td>Children 3-12</td>
</tr>
<tr>
<td>$4.00</td>
<td>$5.50</td>
</tr>
<tr>
<td>Children under 2</td>
<td>Children under 2</td>
</tr>
<tr>
<td>Free</td>
<td>Free</td>
</tr>
</tbody>
</table>

MAJOR ATTRACTIONS:

Africa
Many African species can be seen in this exhibit which simulates nature by seeming to exhibit predator and prey in the same exhibit. Highlights include an African Waterhole and African Savannah.

Aquatic and Reptile Center
This exhibit includes anacondas, endangered Chinese alligators, a giant Pacific octopus, a Lake Wisconsin and Amazon River exhibit, California spiny lobsters, Puget-sound king crabs, and Moon jellyfish.

Asia
Siberian tigers, Bactrian camels and more are housed here.

Australia
Kangaroos, emus, tree kangaroos, kookaburras, and koalas are exhibited in this area.
Feline Building
In outdoor yards, lions, hyenas, jaguars, cheetah, and tigers are free to prowl. Caracal, servals, and clouded leopards are comfortable in a naturalistic indoor exhibit.

Mahler Family Aviary
Hundreds of colorful birds from all over the world move freely in a lushly landscaped tropical paradise.

North America
A lake, rocky ledges, cliffs, and woods house small mammals, caribou, Grizzly bears, elk and more.

Primate Complex
Western lowland gorillas and bonobos are exhibited in a natural environment that represents the West African rain forest. Many other primates including orangutans, siamangs, and spider monkeys can also be seen here.

South America
Macaws and jaguars are featured in of this area.

OTHER ATTRACTIONS:
The Dairy Complex
Discovery Farm
Monkey Island
Raptor Aviary
Small Mammal Building
Stackner Heritage Farm
THE TOLEDO ZOO

2700 Broadway  (419) 385-5721
Toledo, OH 43609

"Our mission is to provide our visitors with an enjoyable, recreational and educational experience while providing for the quality care and propagation of the wildlife in our collection." (The Toledo Zoo Annual Report, 1994)

HOURS:  
April - September:  10 a.m. - 5 p.m.
October - March:  10 a.m. - 4 p.m.

ADMISSION:  
Adults  $5.00  
Seniors 60+  $2.50  
Children 2-11  $2.50  
Children under 2  Free

MAJOR ATTRACTIONS:

African Savanna
This large area contains elephants, Colobus monkeys, birds, giraffes, rhinos, meerkats, lions, antelope, and a hippoquarium.

Diversity of Life
This exhibit area currently contains fruit bats, naked mole-rats, BUGS!, and koalas.

Kingdom of the Apes
Gorillas, orangutans, chimpanzees, and an interpretive center are all located within this exhibit.

Museum of Science
An indoor theatre, BUGS! hands on interactive, the zoo offices, and lost and found are all found in this area.

OTHER ATTRACTIONS:

Aquarium  Conservatory  Polar Bears
Aviary  Formal Gardens  Reptile House
Children's Zoo  Gorilla Meadow  Snow Leopards
Conclusions

Zoos have the difficult task of integrating entertainment, education and wildlife into an experience that is pleasant for the animals and the visitors. Education is vital to zoos and aquariums. Structured programs, interaction with keepers, volunteer or education staff, exhibit design, publications, and graphics are all important ways that educational messages are conveyed to the public. "Nationwide, over 8 million students visit zoos and aquariums each year as part of their classroom curriculum." (AAZPA brochure) A zoo visit may be a student's only experience with animals and may encourage involvement with many wildlife issues.

Many people are responsible for making the zoo experience a pleasant one. There are approximately 30 different positions within a zoo. Among these positions, most are one of the many different types of director, curator, and keeper positions. The most common position is a zoo keeper. Zoo keepers have the demanding job of maintaining captive animals for conservation, research, public education, and recreation. A zoo keepers duties include daily cleaning and maintenance of exhibits; diet preparation and proper feeding; design, repair or construction of exhibits; excellent observation and recording of habits and behaviors; and interacting with the visitors.

"Established in 1924, the American Zoo and Aquarium Association (AZA), formerly known as the AAZPA, is a professional organization dedicated to the advancement of zoos and aquariums in the Americas through conservation, education, scientific studies, and recreation. Originally conceived as a forum for information exchange among zoo and aquarium professionals, AZA has adopted conservation of the world's wildlife and their habitats as its highest priority." ("Membership Services ", AZA brochure) The goals of the AZA are expanded to reflect changes in attitudes, technology, science, and ethics. Several important AZA committees include Species Survival Plans (SSPs), Taxon Advisory Groups (TAGs), Scientific Advisory Groups (SAGs), and Fauna
Interest Groups (FIGs). The most prominent of these is the Species Survival Plan, which is a strategy for the long-term survival of a specific endangered animal. "Through complex scientific calculations and a knowledge of the social and behavioral needs of each species, the SSP pre-plans their family tree. Member institutions work cooperatively in sending particular animals where they are needed to do the most good in contributing to this long-term plan. In other words, zoological institutions now share the responsibility for the management of the animals in the plan."

("The New Ark", AAZPA brochure)

There are some other important record keeping and breeding procedures that occur at zoos. A studbook is a list of all registered specimens of a particular species of captive zoo animal, their sex, parentage, current location, and where appropriate the location and date of death. Studbooks are essential in preventing inbreeding of closely related animals and in promoting genetic diversity. ARKS is the Animals Record Keeping System which is a computerized system of records for each animal. The Convention on International Trade in Endangered Species (CITES) was formed in 1973 and regulates and controls the traffic of animals. Specifically, they determine whether or not a rare animal can be taken from the wild to be placed in a zoo.

Zoos and aquariums may be the last refuges and sanctuaries for many of the world's endangered animals. It is imperative that people begin to take an active role in their local zoo. Zoos are often very dependent upon the revenue of local citizens to maintain the zoo and to be active in conservation. Memberships at most zoos range between $30-$100 per year for a family, which is money well spent. If you cannot afford to become a member of a zoo, volunteer your time. Most volunteers only work 4 hours per week or less. I hope that you have realized the importance of zoos and I hope you are motivated to become active within your local zoo.
Bibliography


Brochures

"Animals of the Night", Memphis Zoo
"A Quick Look at Cat Country", Memphis Zoo
"A Quick Look at Primate Canyon", Memphis Zoo
"Background Information", Detroit Zoological Institute
"Botanical Garden Fact Sheet", Cincinnati Zoo and Botanical Garden
"Cat Country", Memphis Zoo
"Cincinnati Zoo Spotlights Acids of the Arctic", Cincinnati Zoo and Botanical Garden
"Columbus Zoo Facts and Firsts", Columbus Zoo
"Columbus Zoo Guide", Columbus Zoo
"Commitment", The Louisville Zoo
"Distance Learning" The Indianapolis Zoo
"Do the Wild Thing", The Louisville Zoo
"Featuring the Rainforest", Cleveland Metroparks Zoo
"General Information", Knoxville Zoo
"Green Treasures", Toledo Zoo
"Guide Map", Toledo Zoo
"Guide Map", The Louisville Zoo
"History", Cleveland Metroparks Zoo
"How and When It All Began", Memphis Zoo
"It's Wild", Cleveland Metroparks Zoo
"It's Wild. It's Free.", Lincoln Park Zoo
"Jungle Trails Fact Sheet", Cincinnati Zoo and Botanical Garden
"Lincoln Park Zoo: 'Summer '96", Lincoln Park Zoo
"Louisville Zoo Islands Exhibit Fact Sheet", The Louisville Zoo
"Louisville Zoo School Programs", The Louisville Zoo
"Map", Brookfield Zoo
"Map", Columbus Zoo
"Map", Knoxville Zoo
"Map", The Indianapolis Zoo
"Map", Memphis Zoo
"Map and Guide", Detroit Zoo
"Master Plan", Cleveland Metroparks Zoo
"Media Release", The Louisville Zoo
"Membership Services", AZA 1994
"Memphis Zoo Information", Memphis Zoo
"Milwaukee County Zoo Fact Sheet", Milwaukee County Zoo
"The Mission of the Columbus Zoo", Columbus Zoo
"Mission and Purpose", Cincinnati Zoo and Botanical Garden
"Mission Statement", Milwaukee County Zoo
"The New Ark", AAZPA 1990
"News Release", Cincinnati Zoo and Botanical Garden
"1996 Park Map", Cincinnati Zoo and Botanical Garden
"Ohio's Endangered Wild Animals", Division of Wildlife, Ohio Dept. of Natural Resources
"Once Upon a Farm", Memphis Zoo
"Public Education in Zoos and Aquariums", AAZPA
"The Rainforest", Cleveland Metroparks Zoo
"Still Wild After All These Years", Milwaukee County Zoo
"Trunkline: New at the Zoo", The Louisville Zoo
"Welcome", Milwaukee County Zoo
"What's New at Your Zoo", Knoxville Zoo
"The Wildlife Interpretive Gallery", Detroit Zoological Institute
"Winter in the Zoo", Knoxville Zoo
"Zoo and Aquarium Careers", AZA 1994
"Zookeeper as a Career", AAZK
"Zoo Lights", Memphis Zoo
"Zoo Wave", The Louisville Zoo