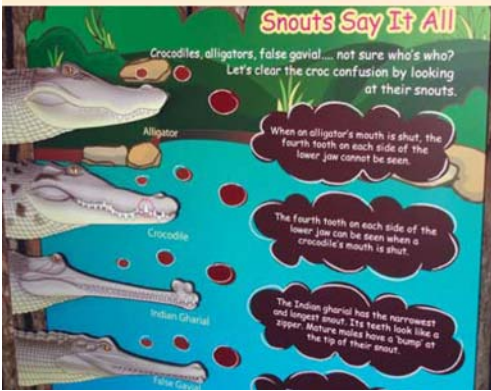




Adding Value to Zoo Visits : An Ideas Sourcebook

for Master Zoo Education Plan



केन्द्रीय चिड़ियाघर प्राधिकरण
Central Zoo Authority

CEE

Centre for Environment Education

Adding Value to Zoo Visits : An Ideas Sourcebook for Master Zoo Education Plan



केन्द्रीय चिड़ियाघर प्राधिकरण
Central Zoo Authority
(STATUTORY BODY UNDER THE MINISTRY OF ENVIRONMENT & FORESTS, GOVT. OF INDIA)

Bikaner House, Annexe VI,
Shahjahan Road, New Delhi - 11011
website : <http://www.cza.nic.in>

CEE

Centre for Environment Education

Nehru Foundation for Development,
Thaltej Tekra, Ahmedabad 380 054 India

Phone: (079) 2685 8002 - 05 **Fax:** (079) 2685 8010

Email: cee@ceeindia.org **Website:** www.ceeindia.org

Acknowledgements

CEE Project Team : Mamata Pandya, Meena Nareshwar, Manisha Choudhary

Graphic Design and Production : Mukesh Panchal

Design Assistance and Layout : Hardik Raval

Illustrations : Mukesh Barad, Shailesh Bhalani, Mukesh Panchal, Wilson Solanki, Vijay Shrimali, Chirag Thumbar, D.M.Thumber

Photographs : International Zoo Educators Association(IZEA) website, Meena Nareshwar, Manisha Choudhary

Support Services : J.K.Nair, Biji Nair

© 2008 CZA and CEE

ISBN : 978-81-89587-45-1

Centre for Environment Education(CEE) is a national institution of excellence for Environmental Education supported by the Ministry of Environment and Forests, Government of India and affiliated to the Nehru Foundation for Development. The main objective of CEE is to create environmental awareness among children, youth, decision makers and the general community. CEE develops innovative programmes and materials and field tests them for their validity and effectiveness. The aim is to provide models that could be easily replicable to suit local conditions.

Central Zoo Authority (CZA)

In India, functioning of zoos is regulated by Central Zoo Authority (CZA) which is a Statuary body of Ministry of Environment & Forests Government of India; constituted in 1992 under the Wild Life (Protection) Act, 1972. The Authority performs the following functions: (a) specify the minimum standards for housing, upkeep and veterinary care of the animals kept in a zoo (b) evaluate and assess the functioning of zoos with respect to the standards or the norms as may be prescribed (c) recognize or derecognize zoos (d) identify endangered species of wild animals for purposes of captive breeding and assigning responsibility in this regard to a zoo (e) coordinate the acquisition, exchange and loaning of animals for breeding purposes (f) ensure maintenance of studbooks of endangered species of wild animals bred in captivity (g) identify priorities and themes with regard to display of captive animals in a zoo (h) coordinate training of zoo personnel in India and outside India (i) coordinate research in captive breeding and educational programmes for the purposes of zoos and (j) provide technical and other assistance to zoos for their proper management and development on scientific lines.

Views expressed in the Zoo Education Master Plan may not necessarily reflect those of the Central Zoo Authority.

Contents

	Foreword	<i>i</i>
	Preface	<i>ii</i>
1	Adding Value to Zoo Visits <i>An Overview</i>	I
2	Attracting Visitors <i>Excite, Enthuse, Entertain</i>	3
3	Engage the Visitor <i>Provoke, Reveal, Interpret</i>	31
4	Zoo as an Outdoor Classroom <i>Sensitize, Inform, Teach</i>	57
5	Outreach <i>Spread, Visit, Encourage</i>	81
6	Sustaining Zoo Education <i>Support, Sponsor, Conserve</i>	89
7	Websites and Zoo Networks	104

Foreword

Chronology of the establishment of zoos across the world reveals that the zoos are the facilities for keeping wild animals in captivity started in the form of private collections of the powerful. The owners at the later times allowed public to visit these private collections and gradually the facilities became public zoos. Conservation education and awareness is probably the most accepted objective of the zoos in the modern world. Personally, I am not in favour of establishment of zoos for conservation education and awareness exclusively. It is very selfish of us to keep wild animals in captivity, if it is not for conservation and welfare of the individuals to be kept there or of the species they belong to. I will be the happiest man if we really do not need zoos. But, we need these captive collections sometimes for conservation breeding of the critically endangered wild animal species and even of common species for their reintroduction, restocking in the wild. Keeping rescued wild animals for life in captivity, if the animals are not fit for release in the wild or the orphaned young or infirm, is needed. Conducting studies on such collections for betterment and conservation should also be taken up, but again research alone should not be the only objective of captive collections. For conservation education, yes, if the other three objectives form the very reason of the animal collection, these facilities should plan for spread of conservation education and awareness without any discomfort to the animals housed. The concept of zoo education is broader. The zoo educators should collect, collate and disseminate information on public opinion and public perceptions of the educational role of the zoos.

CZA & CEE's publication "Adding Value to Zoo Vistis: An Ideas Source Book for Master Zoo Education Plan" is a ready reference publication, which has a compilation of various interesting examples from zoos worldwide. A variety of methodologies have been used to attract, excite and educate zoo visitors. Some of the key areas are; looking at the numerous ways zoos can attract the great diversity of visitors, focusing on different kinds of interpretive techniques that zoos are using, considering how zoos can be used as effective outdoor classrooms, looking at how zoos reach out to the public that does not visit zoos, how to do effective networking and fundraising for sustaining zoo education. I hope this document will also be useful to zoo managers for identifying and formulating various activities and programme for all category of visitors.

131

Dr. B. R. Sharma
Member Secretary
Central Zoo Authority
New Delhi

Preface

It is estimated that some 620 million people visit zoos each year, that is about 10 percent of the world's population. More than 50 percent of the world zoo visitation takes place in Asia.

Modern zoos and aquaria are playing an increasingly active and important role in protecting and managing global biodiversity. Many zoos include wildlife conservation in their mission and have started changing the focus of their institutions in order to increase even further the benefits of their activities for *ex-situ* wildlife conservation.

CEE has always recognized zoos as a major opportunity for conservation of nature and environmental education. At the same time we also recognize the tremendous challenge of converting the zoo experience to a meaningful educational one. Interpreting the experience is the key to zoo education. CEE has been involved right from its inception in 1984 in developing interpretation plans not only for zoos but also in protected areas, where people see animals in the wild.

CEE's interpretation programmes recognize the need to change the mindset of people visiting zoos, national parks and sanctuaries. There is currently a 'single species approach', e.g. in Gir sanctuary people mainly visit to see the lions and ignore other wildlife. CEE's approach has been to draw attention to the innumerable lesser known "stars"

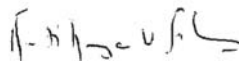
In zoos it's easy to create such a varied "celebrity" culture by finding out what is it that fascinates or caters to people's imagination and designing innovative ways to communicate, as well as educate.

In the 21st century, it is important to develop (the educational role of zoos) so as to have an active and direct impact upon people's attitudes and behaviour. In this way, awareness will be converted into action that has positive benefits for wildlife, people and conservation (WAZA).

"Working together, zoos and aquariums have the potential to be extremely important agents of change in creating a sustainable future and ensuring the conservation of species and habitats on a global scale." (WAZA, In Press)

This publication developed by CEE, is a compilation of interesting examples from zoos around the world which demonstrates the variety of methodologies to attract, excite, enthuse and educate visitors to zoos.

Some key areas have been identified, which would be useful for planning and implementing zoo education programmes.



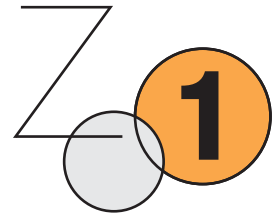
Kartikeya V. Sarabhai

Director

Centre for Environment Education(CEE)

Adding Value to Zoo Visits

An Overview



Zoos reach hundreds of millions of people all over the world. They come to the zoo because, in one way or another, they have an interest in animals. The zoo visiting public includes groups of all ages, educational levels, and diverse social, economic, ethnic and cultural backgrounds. This vast diversity is seldom seen in any other cultural, educational or nature oriented institutions. This provides a huge and unique opportunity for education and potential to highlight public awareness and sensitivity of the importance of nature conservation.

Conservation is one of the main aims of modern zoos. If conservation is to succeed, people need to be inspired to care about and understand nature and animals and the threats they face in the wild, and building support for conservation. For this education is critical.

Zoos appeal to a wide cross-section of society, and their educational mission should be to provide educational experiences for all visitors. Zoo education is far more than information and awareness. It covers a wide spectrum from inspiration to positive action. According to the World Zoo and Aquarium Conservation Strategy the educational aims of zoos and aquariums should include the following:

- To excite, enthuse and interest people about the natural world;
- To encourage understanding of conservation issues and visitor's individual roles in them;
- To provide a range of experiences, materials and resources for the diversity of visitors, to enable them to make informed choices in their daily lives which benefit the environment and wildlife;
- To develop a sense of place as humans in the natural world and an understanding of the relevance of conservation to everyday life.



Royal Bengal Tiger

By creating interactive exhibits, interpretive experiences and programmes that bring people face-to-face with live animals, zoos can profoundly influence their visitors in significant ways. They can contribute to the people's understanding and perception of animals and their conservation, they can contribute to developing people's personal and emotional connections to animals and their conservation, and thereby influence the way people behave, not only towards animals, but in their daily life.

Thus the educational role of zoos is wide in scope and focus. In order to provide meaningful educational information, activities, and experiences for a very broad and diverse audience, zoos need to employ a wide range of techniques and resources.

The profile of the visitors to a zoo is also very wide and varied. Each visitor arrives at a zoo with at least some amount of prior knowledge, experience, interest and motivation. All these have an impact on visitor-learning. Zoos need to be able to capture these characteristics and design programmes and experiences that best cater to this diverse range, in order to fulfil its educational objectives. Zoos need to offer multiple layers of experiences to appeal to this broad array of visitor motivations and interest areas.

So much that a zoo can do

The array of educational possibilities offered by zoos is inexhaustible. To entertain and educate are two obvious roles that a zoo performs. But there is a lot more that a zoo can do: It can engage, inspire, excite, enthuse, provoke, reveal, interpret, sensitize, inform, teach, spread, encourage, support, sponsor, and of course, conserve.

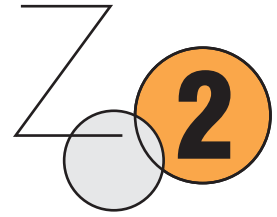
Throughout the zoo community worldwide there are numerous interesting, exciting and effective examples of techniques and resources, from financial to human to achieve the varied outcomes.

This document attempts to compile some of these examples. In many cases these are taken 'as is' from different publications and websites.

The objective is to share these with the zoo community in India, in order to inspire and motivate development of new innovative ideas and enrich existing programmes.



Blackbuck



Attracting Visitors

Excite, Enthuse, Entertain

So Much to do at the Zoo

It is generally accepted that most zoo visitors are motivated to visit the zoo for entertainment or recreation rather than purely educational reasons. It is also found that the most common “group” to visit zoos are family groups. Thus designing appropriate recreation and entertainment opportunities for zoo visitors may be the key to creating suitable contexts for learning.

Thus, in addition to the animal exhibits, interactivity areas, immersion exhibits and special experiences like night safari, zoos need also to offer attractions for a wide spectrum of visitors from pre-school children to people with disabilities.

Given are some examples of how different zoos have addressed these.

Family Attractions

Plaswijck Park is a regionally known family Park in Rotterdam, the Netherlands. Its main target group is children between 2 and 12 years. The park has large playgrounds, a simulated traffic yard and a small zoo. It offers a variety of planned educational programmes on traffic safety, nature, animals and the environment to both schools and individuals.

The Park's **Goblin Route** is designed for children up to the age of 6 years. Following footsteps of different animals, Wallie the Wallaby, the park mascot, guides kids from one assignment to the other, getting them acquainted with different aspects of nature. Along the way, different goblins help them with topics like recognizing sounds, finding and identifying small insects, and measuring the width of a tree. All this is done in the form of happy, carefree games, sometimes using simple tools and other materials.



Garden Spider

The Goblin Route is available as a guided program, using colourful crates of educational and play materials, such as magnifying glasses, pens and pencils, and garden shovels. A free, simple leaflet is available for day visitors, full of assignments, adapted to avoid the use of educational materials. These prove to be very popular. In its first year of action more than five thousand leaflets were requested! The Goblin Route might not be very aspiring, but has turned out to be a winner in casual zoo education!

The **Fun Ark** section of Chester Zoo in UK offers children face painting, pottery painting, trails and talks. (<http://www.chesterzoo.org/>)



Photo : Mukesh Panchal

Night Camp Sleep With the Beasts

Popular attraction at Singapore Zoo is the overnight family camp programme. This is offered as a weekend programme starting on a Saturday afternoon and ending by lunchtime on Sunday. The schedule is well planned to include a variety of experiences in addition to viewing of animals. There is an Australian Outback Tour, a 'Behind the Scenes' peep into the insect breeding area and an animal hospital tour. The participants pitch their own tents, have an outdoor dinner, and enjoy the night safari. The day ends with a campfire programme. The next morning includes a jungle breakfast and sharing bath time with the elephants.

Overall the experience combines a good deal of education but through the fun and excitement of an unusual family outing.

(www.zoo.com.sg/edu/progforallages)

Programmes for Parents and Children

For city dwellers where children have hardly any opportunity to be outdoors in natural settings and interact with nature plants and animals, zoos are potentially ideal recreation-cum-educational venues. Several zoos have recognized this need and opportunity.

The Central Park Zoo in New York offers interactive experiences for children as young as 2-3 years. Most of the programmes are of short duration average 1-2 hours, and each focuses on a specific theme camouflage, body covering, animal movement etc.

They innovatively combine interaction with real animals observation, touching, feeling etc. with art, craft, theatre and story telling.

An interesting menu is available to choose from.



Spring 2008

Can't Find Me!

Animals have a special way of hiding in nature. Meet live animals that "blend in" and use camouflage colouring to survive.

NEW! Sights and Sounds of the Rainforest

Explore the rainforest using your senses. Play a game of rainforest animal bingo, meet live animal guests, and enjoy a tasty treat from the tropics.

Ages 4-5, with adult

Spring & Summer 2008

Toddler Time Series

Explore furry friends, scaly critters, and prickly pals and compare how they feel. Live animals, movement, and a craft are part of the fun. Come to one class or all three!

Ages 2-3, with adult

Hop, Skip, and Jump Like the Animals!

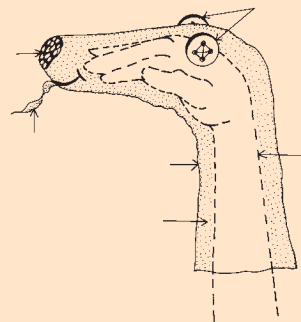
Youngsters will love imitating their favourite animals in this exciting program. Meet various creatures and compare how they move.

Ages 2-3, with adult

Saturday Animal Sing-Along

Enjoy songs and puppet shows from our Wildlife Theater troupe. Sing along to your favourite hits and meet live animals featured in the songs.

Ages 2-6, with adult



Classy Critters

Explore animal groups and learn what they have in common, and what makes them unique. Songs, live animals, and a fun craft will inspire wildlife fans of all ages.

Ages 3-4, with adult



Reading Celebration

Share storytime at the zoo with animal-themed books by renowned children's authors. Meet live critters from the stories and take home a craft inspired by the illustrations.

Ages 3-4, with adult

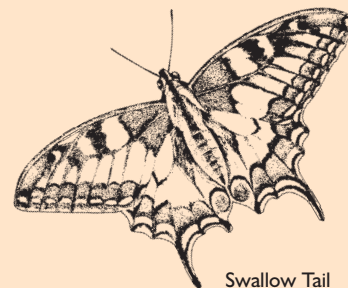
Eggcellent Animals

Which came first: the snake or the egg? Chickens aren't the only animals that hatch from eggs. Learn about egg-laying animals, colour, eggs, and meet some "eggcellent" critters.

Butterfly Boogie

Ring in spring with all kinds of crawly critters! The Wildlife Theatre Players will perform a show that any junior entomologist (or bug lover) will enjoy. After the program, touch and feel real animals. Zoo admission included.

Ages 5 & up only



Swallow Tail

Spring and Summer Wildlife Weeks

These multi-day programs are filled with live animals, zoo exploration, crafts, games, and more. Snack and a T-shirt are included. Children bring their lunch for all sessions. Space is limited.

Kinder Zoo

During this 4-day adventure we'll explore animal groups including mammals, reptiles, birds, and amphibians.

Ages 4-5

Week of Wildlife

Discover the diverse worlds of the animal kingdom as we explore different habitats. This 5-day program will focus on rainforests, temperate forests, wetlands, polar habitats, and conservation. Wildlife Theatre presentations will enhance our habitat study.

Ages 6-7

Zoo Explorer

Delve into the wonderful world of the Central Park Zoo's, USA wildlife in this 5-day program. Learn what makes our animals and their homes so special. Conservation lessons will also teach children how to help wildlife.

Ages 8-9

Junior Keepers

Want to be a zookeeper when you grow up? Find out about keeper responsibilities in this 5-day program. Meet keepers, go behind the scenes, and help prepare special treats for several zoo critters. Kids also design an exhibit for our Exhibit Fair.

Ages 10-12

(<http://www.nyzoosandaquarium.com/czeducation/centralparkprogram>)

Catch Them Young!

It's never too early to start enjoying and learning. Cincinnati Zoo's, USA starts at ages 18-36 months! Shapes, colours, body parts are introduced and explored by seeing, hearing, feeling and doing.

There are modules for different age-groups until 14 years, suited to their interests and linking to concepts that they would be learning through the curriculum. The modules include live animal encounters with age and level appropriate activities and learning opportunities.

Spring Series: 18-36 Months

These special programs are especially for kids 18-36 months old. Parents and their child will see an animal demonstration and then take a guided stroll through the Zoo for different hands-on learning adventures. Don't forget to bring your stroller! (No charge for accompanying adult.) **Limit of 10 participants per session**



Note: Due to the hands-on and interactive nature of these programs, siblings not falling within the 18-36 month age range, including infants, cannot be accommodated. Please check our youth program listings for programs offered simultaneously for other age groups.

Sign up for individual classes, or for the entire series and save!

Creature Features

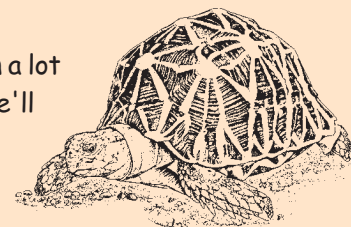
What body parts do we have in common with the Zoo animals? Noses? Feet? Eyes? Come to the Zoo and we'll take a stroll to learn which creature features we share with the Zoo's animal residents.

Colour Quest

Bright, vibrant flowers are blooming, green leaves and grass are all around...Spring is a great time to learn about colours! We will take a stroll through the Zoo, look closely, and let nature help us to learn our colours.

Sharing Shapes

Round leaves, triangular animal ears, oval turtle shells...Wow, nature sure takes on a lot of shapes! We will take a stroll through the zoo on a shape scavenger hunt where we'll use our eyes and our hands to find and explore the different shapes of nature.



Starred Tortoise

Spring Series: 3 Year Olds

These programs are designed especially for three year olds and a parent. (No charge for adult.) Through songs, crafts, games, and visits with animal friends, your child will explore the wonder of wildlife in a fun and child-friendly environment.

Sign up for individual classes, or for the entire three-class series and save!

Tails, Tails, Tails

What would you look like if you were the fastest animal on land and had a tail like the cheetah? We'll discover why tails are so important to animals by trying on some different animal tails and meeting some special animal guests with unusual tails. We'll even make a tail that you can wear home!

Be a Little Buggy

Insects live all around us and come in many shapes, sizes, and colors. Learn about some of the insects you can find at the Zoo as well as some you may see in your own backyard as we build a bug, sing a song and create your own buggy craft to take home. And who knows, some animal guests that are guaranteed to "bug" you might drop by for a visit!

Animal Textures

Whether it's prickly quills, a smooth turtle shell, or soft fluffy fur, animals are covered in a variety of textures that do everything from keep the rain out to keep the animal warm! With the help of some animal friends that you can touch, we'll discover what different animals feel like and discover whether their texture is a good raincoat or a winter coat for the animal!

Spring Series: 4-5 Year Olds

These programs are designed especially to meet the needs of four and five year olds as they continue to discover the excitement and wonder of animals. Visits from animal friends, hikes in the zoo, and crafts make this learning experience a time to remember. Adults are always welcome, but need not accompany the child. (No charge for adult.)

Sign up for individual classes, or for the entire three-class series and save!

Night Time Neighbours

Did you know that when you go to sleep, many animals are just waking up? We'll meet some nocturnal neighbours and learn about what senses they use to move around while you're sleeping!

Animal Giants

Growing up giant-sized is hard work! From elephants to polar bears, finding enough food and space can be a challenge! Discover what it takes to be a giant as we meet some giant animal friends in the classroom, then search the zoo for other giants!



Reptile Romp

If you're interested in scaly ectotherms do we have a program for you! With the help of some reptilian friends, discover the similarities and differences between snakes, alligators, turtles, and lizards. From boas to snapping turtles, come find out why reptiles have what it takes to survive!

Special Program for 4-7 Year Olds

Zoo Yoga for Kids

Limit: 12 children per class section

Explore the world of animals and plants in a fun new way through yoga. Your child will learn about animals and plants through the practice of yoga. Many of the poses in yoga are named after animals found in India. This fun and active program is a great entry level class for your child and is a great foundation for developing an interest in wildlife and fitness that can last a lifetime. Afterward, explore the zoo on your own or together with others from the class. Yoga mats provided.

Spring Series: 6-7 Year Olds

Exploring, experiencing, and discovering are activities for these programs for six and seven year olds. Designed to foster your child's excitement in animals, the program combines live animal encounters with age-appropriate activities and learning opportunities. Adults are always welcome but need not accompany the child. (No charge for adults.)

Sign up for individual classes, or for the entire three-class series and save!

Arthur the Aardvark

What do aardvarks, anteaters, and tenrecs have in common? They're all insectivores! While Arthur may be the most famous one, there are lots of other animals that love to eat insects! Explore the world of insectivores as we figure out how they catch and consume their food with some games, live animal encounters, and a hike in the Zoo.

Lizard Tales and Scales

Leapin' lizards! Come out and take a close look at one of the fascinating groups of reptiles lizards! We'll go on a search to find the species of lizard that holds the title for "longest lizard in the world" and if you think it's a Komodo dragon, you just might be surprised!



Indian Chameleon

Diggin' In The Dirt

Explore the world of animals that live under our feet! From naked mole rats to insects, discover how your life changes when you spend all your time burrowing in the dirt.

Spring Series: 8-11 Year Olds

Exploring, experiencing, and discovering are activities for these programs for eight to eleven year olds. Designed to foster your child's excitement in animals, the program combines live animal encounters with age-appropriate activities and learning opportunities. Adults are always welcome but need not accompany the child. (No charge for adults.)

Sign up for individual classes, or for the entire three class series and save!

Cat Show Trainers L: Conservation

Back by popular demand! Have you ever wondered what it takes to be a cat show trainer at the Zoo? In this exciting series of three classes (one per month), explore the role of the Zoo's cat show trainers and discover what important elements are involved in their jobs. During each class, a member of the Cat Ambassador Program will be on hand, helping to provide up close views of some of the cats with which they

work while discussing the importance of training, enrichment, and conservation for these cats. Some feline friends will also be on hand to share a conservation story. Participants who attend all three classes will receive a certificate of completion at the final class.



(Unfortunately, due to space and logistical constraints, parents and siblings will not be able to be accommodated).

Cat Show Trainers LI: Training

(Second in a series on the role of cat trainers at the Zoo)

Take an in-depth look at how our cat show staff uses training techniques with cats in the cat show. With the help of some purrrrrfectly incredible cats, you'll see the in's and out's of training an animal. Before you leave, you'll even have an opportunity to try training as well.

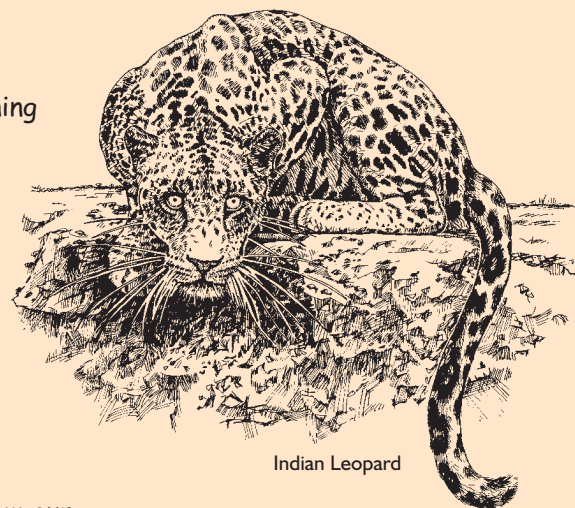
(Unfortunately, due to space and logistical constraints, parents and siblings will not be able to be accommodated).

Cat Show Trainers LII: Enrichment

(Third in a series on the role of cat trainers at the Zoo)

In the third and final class on cat show trainers, discover how our staff works hard to provide enrichment to the show's cats. Things might be a little messy - plan on helping create an enrichment item which we will then take up to the Cat Show yard and share with the cats. It will be a memorable experience!

(Unfortunately, due to space and logistical constraints, parents and siblings will not be able to be accommodated).



Indian Leopard

Spring Series: 12-14 Year Olds

Food for Thought

Feeding over 500 different species of animals is no easy feat! From insectivores to carnivores and newborn to elderly, every animal has their own special needs that must be met. Come and learn about how and where the Zoo holds, cooks, and distributes the Zoo animal's food and even get an opportunity to feed the goats a snack.

Birds and Binoculars

Feeling flighty? Migrate on over to the Zoo to learn about the different birds that use the Zoo as a resting stop on their flights back north. We'll go on a birding hike to see how many species we can find at the Zoo and meet some native birds in our classroom. We'll have binoculars on hand to borrow, or feel free to bring your own!

(www.cincyzoo.org/education/)

Zoo Explorer Camp

Singapore Zoo runs 5-day camps for students. These do not involve overnight stays, but offer a well-structured programme from 9 am to 5 pm. Each day begins with briefing and ends with debriefing on the experiences of the day. Children get a variety of hands-on experiences from riding an elephant to creating their own zoo craft from paper, balloons, etc. Each hour-long session has a specific theme whether it is "creepy crawlies" or zoo babies, or reptiles, or body coverings. They interact with animal keepers, and learn about the care of animals, observe at animal feeding times and even learn about the plants.

(<http://www.zoo.com.sg/education/progforallages/zooexplorer.html>)

Inspiring Young Poets

The Bronx Zoo in New York has an annual Poetry Safari Contest for aspiring poets between 8-13 years old. The 2007 poetry contest attracted 2116 entries from across the United States. The entries were in four categories: Nature's Wonders and Surprises, Endangered Wildlife, Kids for Planet Earth, and North American Wildlife Wonders.

24 winners were selected. The winning entries were put up on the zoo website.



Some examples:

Bengal Tigers

The tigers we see, roaming in the wild,
Are active and playful, much like a small child.
But they are beautiful, not cute and not cuddly,
And their numbers are dropping, quickly and suddenly.
Their stripes are unique, each pattern its own,
And we want to wear them, so we order by phone.

We all are humans, too greedy to see.
That a tiger is a bit like you and like me.
It is living and breathing, but dying too quickly,
They are almost extinct, the thought's realty quite sickly.
Faux fur may not seem quite as real,
But it's worth giving tigers another good meal.

Safe places like forests, and on the plains too,
And where tigers live, if only by few,

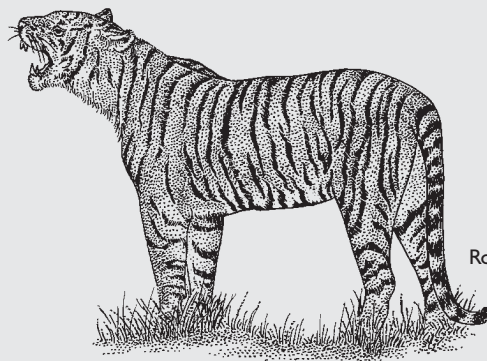
They also have habitats now in some zoos,
Where you can go to see a tiger snooze,
Or see one bounding, and leaping in action,
To show that its beauty is its very own fashion,
It's not meant to be worn by humans world wide,
But by tigers to help them to hunt and survive.

The population grows slightly year by year,
But will drop again, if we even hunt near,
Because even tigers have to eat,
Not fruits and vegetables, but fresh meat.
And when ANYTHING cannot eat,
It starves and dies, giving in to defeat.

Jessica Shortlidge

Age 10

Honourable Mention: Endangered Wildlife



Royal Bengal Tiger

Porcupine

Sharp, spiked, sweet
simple, plain, sleek,
a stinging small beast,
roaming the forest,
scraping bark off trees,
harmless.



Indian Porcupine

Prickly. non-pouncing,
with Spikes to defend.

The other animals,
just can't remember,
what happened the
last lime.

Soundless, almost a ball of spike,
can't help that it has thorns,
can't help that it's lt.

Christina Carlson

Age 10

Winner: North American Wildlife Wonders

The eye of the hawk,
The ear of the bat,
The eyesight of the cat,
The leap of the cheetah,
The howl of the wolf,
The soar of the birds,
These animal splendors
Make nature's wonders

Gumihal Singh

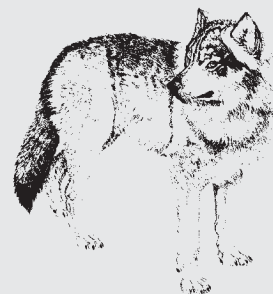
Age 10

Honourable Mention: Nature's Wonders and Surprises

([Http://bronxzoo.com/bz-education/poetrysafariwinners](http://bronxzoo.com/bz-education/poetrysafariwinners))



Greater Fruit Bat



Wolf

No Parents Please

While family outings are popular, some zoos offer special experiences for children. Younger children (4-6 years) burn up extra energy as they try to dance like the animals, and get a chance to see swinging gibbons, hopping kangaroos.

Older children (8-12 years) get a glimpse of what it would be like to work at the zoo and find out about related careers options at the Bronx Zoos' programme Working for Wildlife.

Working for Wildlife

What would it be like to work at the Bronx Zoo? Who decides what to feed a lion and how much it needs to eat? Who designs the 'toys' that keep Bronx Zoo animals active and healthy? If your 8 to 12 year old has a love and fascination for animals, or an interest in someday working with wildlife, this one-of-a-kind program will open up a world of possibilities. We'll introduce children to the variety of charismatic careers that are involved with maintaining and caring for the more than 4,000 animals who call the Bronx Zoo home. A pizza party lunch is included! (<http://bronxzoo.com>)

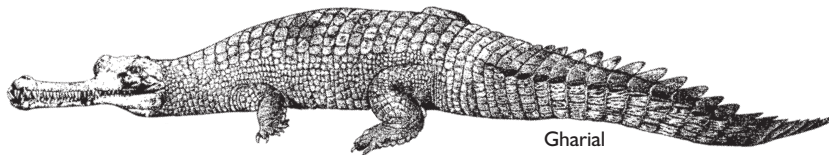
Scientists of the Future

The Discovery Centre at the Prospect Zoo Park in New York attracts aspiring veterinarians, scientists and wildlife enthusiasts. The Centre has various learning stations where children can hone their scientific skills with the same tools that the experts use. They can peer through a microscope, lens, explore the zoo's living laboratory, by their veterinary skills on animal puppets, and become field detectives to help trace clues about wildlife. The Centre is open on weekends from 11 am to 3 pm for all, but group bookings can be made for week day visits.

Researchers

The Centre for Herpetology Library at the Madras Crocodile Bank Trust (MCBT) has the largest herpetological collection in India, started in a very modest way by Harry Andrews, ex. director, MCBT; through acquisitions of books, journals, newsletters and reprints, through exchanges, correspondence and networking, which has resulted in 1000's of books, reprints and newsletters. This library is current and upto date with publications from India and

abroad and is used by student (schools and colleges), university staff, forest departments and researchers from within India and overseas. Information on new herpetological books and current literature is circulated via the MCBT newsletter. Herpinstance and book reviews are regularly published in *Hamadryad*. The library also has a small section with books, reprints, reports and other publications on the Andaman and Nicobar Islands, besides a general section with other books, newsletters, directories, video tapes and photographs.

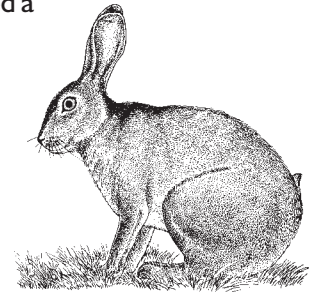


Gharial

Puppet Theatre

Puppetry, a traditional art in India is rapidly dying out; Madras Crocodile Bank launched a puppet theatre for the purpose of reviving this dying art form in rural areas and as an Environment Educational (EE) tool for environmental awareness programs. Village youth and children have been trained in the art of puppetry and puppet making and now manage and conduct shows regularly on weekends for the visiting public, schools and other groups that visit the Madras Crocodile Bank. Puppet theatre workshops are regularly conducted for other village children and children from the city who participate in nature camps and awareness programs conducted at the Madras Crocodile Bank.

(<http://www.madrascrocodilebank.org/Education.htm>)



Black Naped Hare

Through the Lens

Adelaide Zoo, Australia offers photography courses for beginners as well as for advanced levels. Under the guidance of an experienced photographer, participants learn the techniques of the medium and get practical experience of clicking opportunities at the zoo, including visits behind the scenes areas. The one-day course fees include a return visit to the zoo for a follow up session to share, view and critique photos taken during the course. (<http://www.adelaidezoo.com.au/education>)

Morning at the Zoo

Some zoos offer an early morning photography session before the zoo officially opens to the public. Others have “member mornings” where those who have a zoo membership are invited to start their visit one hour before zoo opening time, to see keepers preparing to open the zoo including releasing of some of the animals from their night enclosure.

Something for Everybody

Many different methodologies and techniques are used by zoos to promote its activities. Celebration of special events is one such technique. A few examples of such attractions are given here.

Music at the Zoo

Perth Zoo, Australia organizes open air music concerts in the summer. As the days are long during this season, even the animal viewing hours are extended. This gives visitors a chance to see animals that are more active during the cooler twilight hours. (www.perthzoo.wa.gov.au/Events/Whats-On2/)

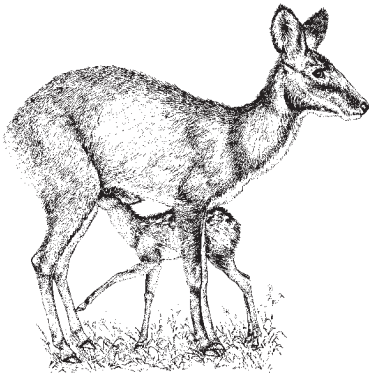
Keeper for a Day

Santa Barbara Zoo, USA offers one such day every month where participants get an opportunity to work alongside an animal keeper for all the tasks, including creating and providing enrichment toys for the animals. They also get to spend two hours with their favourite animal, seeing them and enjoying their enrichment toy. At the end of the day they get a certificate acknowledging participation and a souvenir. There is a fee for participation in this programme. (www.santabarbarazoo.org/events.asp)

Around the World in a Day

Toledo Zoo, USA builds a geography lesson around the zoo animals through a programme to discover the various regions that the zoo animals come from and participate in activities related to the cultures and countries of the different regions. (www.toledozoo.org/events/events_spring.html)

Animal Play Day at the Gladys Porter Zoo, USA is performed on a daily basis at a fixed time when the public is invited to witness animal enrichment in action. That is when animals receive food and other enrichment items that have a specific theme. For example, “tons of tortillas” where throughout the day animals receive tortillas in various forms. (www.gpz.org/news.html)



Musk Deer with Fawn

Mother's Day is a popular event that attracts mothers and children. Zoos offer special Mother's Day brunches, a chance to meet new zoo mothers, to see zoo mothers with their babies, the paw print gift of a zoo mother, and other 'mother' themed activities.



Annual Calendar of Events

Many zoos make available the calendar of planned events either for the entire year or for six months. This is usually put up on the zoo website. Suitable activities and special attractions to mark the different days are publicized. These are generally designed in keeping with the specific theme or topic for the day, if there is one. Here are some interesting examples.

2008 being a leap year, many zoos held events on 29 February and used the “Leap” theme to organize programmes to highlight frog-related topics especially as 2008 was also declared as the “Year of the Frog”.

Denver Zoo's (USA) Leap Day special programme included a frog mascot to welcome guests, interactive sessions at the Tropical Discovery Centre to learn about amphibians, threats and what to do to save them, and also a peep behind the scenes at the amphibian house guided by zoo keepers. The month of April is a good time to plan ape-related events which include finding out more about apes and comparing and contrasting them with humans, how they walk, their 'arms', how they eat and how they talk. (www.denverzoo.org/visitors/events.asp)

Johannesburg Zoo, South Africa announced a year-long programme of amphibian-related activities to mark the “Year of the Frog” in 2008.

29 February: Leap Day a physical fun day where learners can jump on trampolines, jumping castles and skipping ropes to leap like frogs. Children are invited to participate in education programmes with live frog demonstrations, as well as art and writing messages to frogs. The Zoo frogs may also be adopted and a prize for the best frog name will be given. The day starts at 9:30 am. and ends at 12:30 pm. with schools

booking per time slot. Their visit will include a Zoo DVD giving more information on the “Year of the frog” and fun sheets to take back to school. The frog art will culminate in an Art exhibition in October 2008, as each frog activity throughout the year will include an invitation to submit art.

5th & 12th March: Educators’ Amphibian workshops - a workshop in the Zoo to introduce educators to Amphibians, the work that the Zoo does as well as education programmes offered by the Zoo including an outreach programme to the schools - how educators can use the Zoo to assist them with their education programmes

17th March: St Patrick's Day a family sunset stroll in the Zoo from 5:00 pm to 8:00 pm. Frog experts will be on hand to show live frogs and talk about conservation and threats. Family entertainment is arranged for young and old.

3rd-5th May: Sasol Birdfair the Zoo will place emphasis on the role that frogs play in food webs and the effect on birds if frogs had to become extinct. The Sasol Birdfair is focused on cultivating bird lovers and enjoyment of nature.

5th June: World Environment Day: The main education theme will be focused on the health of water systems such as dams, rivers and wetlands and how we can contribute to the conservation of frogs. We expect between 2500- 5000 school learners to participate in various activities.

July and August Holiday programmes - Fun activities for kids from 3 years - 14 years old focused on frog athletics, frog habitats, frog eating habits and conservation. Individuals book these programmes on a daily basis.

5th September: Arbor Day: A programme that focuses on trees but we will place special emphasis on frogs and the role of trees in the lives of frogs. We expect between 2500- 5000 learners for this celebration.

4th October: World Animal Day: Frog Art Exhibition from 10:00 am. to 4:00 pm. exhibiting and selling art collected throughout the year to raise funds for the conservation of frogs.

(www.jhbmzoo.org.za/explore_frog.html)

Similar events are also offered to mark Father's Day.

Animal Celebrities

There are times when an animal in the zoo catches the fancy of the media, and through them of the public. It could be a new baby which is appealing in appearance or one which has a story attached such as being rejected by its mother at birth, and being raised by the keeper, or an 'exotic' animal that has been sent from another zoo. This kind of celebrity attracts big crowds. One such example was the tremendous publicity generated around the polar bear cub Knut at Berlin Zoo, UK in 2007. The cub was the first polar bear to be born in Berlin Zoo in over 30 years, and was rejected by his mother. The cub spent the first month or so in the incubator under the care of his keeper. The local and even international press found this a good story and followed up with daily bulletins on the cub. The publicity resulted in a huge increase in visitors to the zoo, with long lines to get a glimpse of Knut.

The popularity of the 'celebrity cub' also resulted in a huge merchandizing opportunity with companies bringing out a range of Knut products like soft toys, post cards, books and other souvenirs. Some of the companies contributed part of the earning from the products to the zoo, and it was used to renovate the polar bear enclosure. The celebration of Knut's first birthday was attended by hundreds of children and broadcast live on German television. The National Mint also offered 25,000 special commemorative silver coins to mark his birthday.



Photo : www.rightwingchamp.com

The Berlin Zoo registered Knut as a trademark. The zoo reported that its attendance figure for 2007 increased by an estimated 30 per cent, making it the most profitable in its 163 year history. Thus Knut became an effective means of communication about the environment, and a mascot or logo for environmental conferences and causes.

Animal Birthday Celebrations

Belize Zoo, Belize celebrates one day in April as the birthday of April, its resident Tapir. Tapir is also the national animal of Belize. On this day visitors and school children can see April enjoying her birthday cake made of horse food and carrots, and garnished with red hibiscus flowers, while children sing the Happy Birthday song. April is a zoo celebrity and an effective messenger for the conservation message. (www.belizezoo.org)



All Kinds of Celebrations

Several zoos offer venues for company events, birthday parties, and even weddings and receptions. These are usually held after the zoo closing hours, and in specific areas of the zoo premises. The venue has to be booked, and the event planned in consultation with the zoo authorities. Most zoos have their norms, charges and regulations about what can and cannot be done. Several offer facilities like catering also.

The Prospect Park Zoo, USA offers to host birthday parties for children from 3-10 year olds.

Have a wild birthday party at the Prospect Park Zoo! Kids aged between 3 -10 year olds can get up close and personal with some of our resident animals, create a craft to take home (or prepare a special snack for one of the animals), and explore an exhibit in the zoo. There are six exciting party themes including Sea Lion Celebration and Junior Zoo Keeper.



Prospect Park Zoo birthday parties are held in our spacious party room, located in the Orientation Building. Each party combines fun activities, arts and crafts, and visits to exhibits around the zoo, with your choice of animal themes.

Parties can be scheduled for a Saturday or Sunday at 10:30 a.m. or 1:30 p.m. and last for an hour and a half. Two hour party options are available.

The guardians and the birthday child can have access to the room a half-hour before the party to set up. No balloons, please!

You will need to bring your own cake, juice, paper goods and utensils. There is no refrigeration available.

Invitations with directions to the Zoo will be sent to you when your payment is received, and your contract is confirmed. Payment must be made two weeks in advance of the party.

Please call (718) 399-7324 to make a reservation.

450 Flatbush Avenue
Brooklyn, NY 11225



Have a *wild* BIRTHDAY PARTY at the Prospect Park Zoo!



**PROSPECT
PARK ZOO**

Choose one of our Party options-

Option 1

For 15 children, 3 adults (\$400)

Option 2

For 22 children, 3 adults (\$450)

New! Need more time? We can add an extra half hour to your party, to give you time to bring in additional snacks for your guests. This option is available for our afternoon sessions only. (\$50 added fee).

WCS members or Prospect Park Zoo Annual Pass holders receive a \$20 discount on each party plan.

Your party package includes party invitations, birthday party activities related to the selected theme, a take-home craft (or animal enrichment activity), live animals visits to your party room, goody bags for the kids and zoo admission.

For our youngest guests, the party parents may choose the adult to child ratio. We are sorry, but we cannot accommodate groups larger than 25 people (including the birthday family).

then select a fun Animal theme...

Barnyard Birthday

(Ages 3-5)



Join Aggie the Cow and her barnyard buddies for a party filled with activities such as feeding the pygmy goats, playing barnyard games, and even petting an alpaca's nose!



Zoo Rainbow

(Ages 5-7)

Why are animals brown and green, bright and beautiful, or snowy white? During this party, kids will explore the reasons behind the coloration of creatures from around the globe. They'll even make a colorful creation to take home.

Scales and Trails

(Ages 6-9)



Here's your chance to meet some of our scaly, slimy creatures that call the Zoo home. On your Zoo Scavenger Hunt you'll encounter reptiles such as swimming turtles or slithering snakes, and amphibians like our poison dart frogs! This party will surely be a memorable one.

Sea Lion Celebration

(Ages 6-9)



Spend your birthday exploring the world of the sea lion. You will play sea lion training games, investigate the differences between seals and sea lions, and find out some other exciting facts about mammals. You'll even visit our zoo kitchen to meet the keepers and watch them prepare a meal for our flippered friends!

Junior Zoo Keeper

(Ages 7-10)



Ever wonder what it's like to work in a zoo? During this party, you'll meet some animals (and find out how our keepers care for them), play a zoo-keeper game, prepare some animal enrichment, and even meet a keeper in person, too!

Discovery Party

(Ages 3 - 10)



Look, listen, touch, and smell! At this fun party, kids will discover how animals use their senses. Then you and your guests will use your own senses to explore our exciting Discovery Center! *Afternoon times for this theme will be 2:00 - 3:30 to guarantee private party time in the Discovery Center.*

Humans as Exhibits

In 2005, London Zoo opened a new enclosure in the large mammals section. Within the enclosure were eight specimens of the human species (*Homo sapiens*). The new exhibits invited tremendous media exposure and large crowds. It was the opening of the campaign to highlight humanity's status as a “plague species”. The human exhibits spent the day in the enclosure doing what most other exhibits would do feeding, enrichment activities and sitting or moving around. One of the volunteers, a 19 year old veterinary science student said “I am fascinated by how we perceive animals and how they sell us. So this is an opportunity to be on the receiving end”.

The idea which was conceived by the zoo's communications manager was to convey the message of the impact of human beings on the environment, and the danger that if we go on destroying our environment, one day the only place you could see human beings would be a zoo. It was the opening of the campaign to highlight humanity status as a 'plague species'.

In 2007 Adelaide Zoo announced a similar Human Zoo project and invited people to apply for the experience. (www.humanzoo.com.au/concept.htm)



Promotion and Publicity

While hundreds of thousands of people all over the world visit zoos, there are still millions of people who do not for one reason or another. Some do not go because they have no interest in animals, while others because they have not seen anything that will attract them to undertake a zoo visit. Many zoos have realized that as with any other facility or programme, it is important to increase public awareness about the zoo, in order to increase attendance. Thus publicity, promotion and public as well as media relations are becoming an integral part of the planning in zoos. Several zoos have a communications and marketing team to take care of these aspects.



Tiger Cub

The media plays a decisive role in promoting the image of the zoo, whether positively or negatively. A hostile or ill-informed media person can carry stories about zoo animals and their treatment, health, etc. which may deter potential visitors.

On the other hand, stories in the media about new animals at the zoo, special events such as birth of a baby animal or arrival of new animal, or illness of a popular animal attraction, can create a great deal of curiosity and empathy and attract people to visit the zoo. Realizing the value of media exposure, some zoos have a public relations coordinator on the staff. The role includes day-to-day liaison with media to ensure accuracy, clarity and consistency in communication about the zoo, responding to press enquiries, general public enquiries, resolving issues and addressing complaints. It may also include external as well as internal communication (press releases, newsletters, and websites), as well as public relations functions for on-site events.

Websites

Websites are today an effective way to reach out to a very large public potential visitors, regular visitors, those with special interests (teachers, researchers, friends of the zoo, interested volunteers, etc.)

Zoos use websites to provide basic information about the location, timings, exhibits etc. as well as inform about events, updates and programmes. The websites are constantly updated and current. Website thus performs many functions as an educational resource, a ready reference, and a marketing opportunity.

Visitors with Special Needs

Many zoos are now designed so as to be accessible for visitors with disabilities or other special needs. This means paths which are accessible by wheelchair and prams, ramps and allocated areas for viewing exhibits and animal shows, toilets which have appropriate facilities and designated parking areas. Some zoos loan without charge.

Many zoos offer discounts or reduced rates for entrance fees to people with disabilities and other special needs.

(<http://www.zoo.com.sg/visitor/disabledfriendlyfacilities.htm>)

(<http://www.stlzoo.org/yourvisit/guestservices/>)

(<http://www.chesterzoo.org/>)

Los Angeles Zoo, USA offers sign language interpreters, braille information, assistive listening devices and other assistance on request and with reasonable advance notice. (http://www.lazoo.org/visit/rentals_accessibility.html)

Deaf Day is an annual day designed specifically to cater to the deaf/dumb and blind community. On this day presentations and programmes are conducted by sign language interpreters, and they are also present at the various animal exhibits throughout the zoo along with the zoo docents to deliver presentations and answer questions. This is a special event on the calendar of the Nashville Zoo, USA. (www.nashvillezoo.org/events.asp)

Some zoos offer special timings or days on which underprivileged groups (children from orphanage, or NGO) can visit the zoo without any charge. For example, Mysore Zoo, South India is closed for the general public on Tuesdays, but can be visited by such special groups.

Animal assisted Therapy

The Tisch Family Zoological Gardens in Jerusalem has been sponsoring a special education project of using interactions with animals as a therapeutic experience for children suffering from autism, deafness, disabilities and mental and emotional problems. The Zoological collection creates unusual opportunities for activities.

The zoological collection creates unusual opportunities for activities with different experiences and a diversity of contact. Varying activities and experiences that no usual petting zoo can give, like contact with an elephant or with small exotic animals and husbandry of the ponies, goats, sheep, chickens and parrots make the activities exciting and especially attractive.

The visit to the zoo is a special experience for the children who especially anticipate it. The arrival at the zoo, even if it is a weekly event, is a breaking of routine which is for most of the children difficult. The children feel specially important. The activity area is almost limitless in an environment which is friendly and soothing and safe.

The children go into many animal houses, gardens and exhibits from behind the scenes and the meeting with the professional keepers enriches their activities.

There are many options for different activities. In every one of the options mentioned above, a wide variety of animals can be chosen depending on the desire of the child.

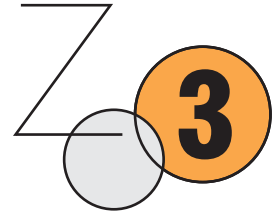


The therapy with animals includes many aspects. In order to form a connection with the animal both concentration and self discipline is needed. This is not a verbal process, but one of emotion and trust. The child needs to take responsibility and adapt to the animal's needs which is part of a growing process. The child meets the good side of the animal, feeds, pets and cleans it and therefore does things for others which up to now has only been done by others for him. The therapy gives a sensation of empowerment by allowing the child to determine for the animal what it will eat and how it will be housed. During the therapy the child must control many urges, especially violent ones, which helps him deal with the real world.

The sessions are an ongoing thing which involves a regular connection with the animals. The activities in the zoo are something outside of the child's everyday world. It is different in every possible way from the other environment in which the child lives. The child derives happiness and security from knowing that the animals wait for him every week at the zoo. The physical contact with the animals gives an answer to the common need for contact which does not always come from the family or environment in which the child normally finds himself or herself.

(<http://www.jerusalemzoo.org.il/en/>)





Engaging the Visitor

Provoke, Reveal, Interpret

For most of the thousands of visitors to zoos, the educational component is generally limited to looking at the animals and reading information about them. This is generally a passive activity and it is most likely that 'learning' from this would be temporary and superficial.

In the last few decades it is accepted that a more active involvement of visitors in the zoo visit experience enhances the educational element and also the attractiveness of the experience.

Multi-sensory Experiences

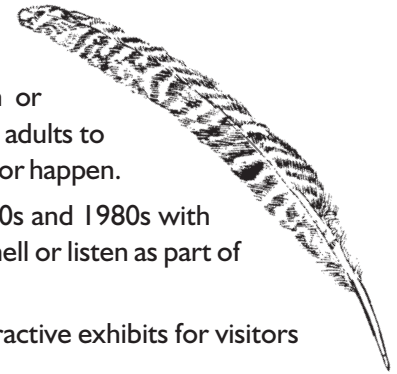
One methodology for this is 'interactivity', a method based on offering practical experiences where the visitor is actively involved in discovering information or analysing an event. Interactive experiences motivate children, young people and adults to be more curious and also to understand how and why things are the way they are, or happen.

The history of interactivity in zoos in the western world started in the late 1970s and 1980s with zoos starting to include "contact areas" or spaces where people could touch, smell or listen as part of the zoo experience.

Some of the early initiatives in this direction were setting up of rooms with interactive exhibits for visitors such as eggs, feathers, skulls, skeletons, etc.

The ZOOLAB set up in 1977 in the National Zoo in Washington DC was one of the early examples of this. The success of this led to the creation of a BIRDLAB at the end of 1978 and HERPLAB in 1982, in the same zoo.

In 1987, at the European Zoo Educator's Conference held in Copenhagen, Denmark, it was emphasized that 'if we want to invest wisely in the future growth of the education programmes in zoos, we have to design areas that satisfy the visitor's curiosity via direct participation'.



Thus interactivity provides a kind of informal education which can reach out to all sorts of audiences.

There is a wide variety of programmes which provide a range of different experiences to zoo visitors. Some examples are shared here.

La Guarida: The Den

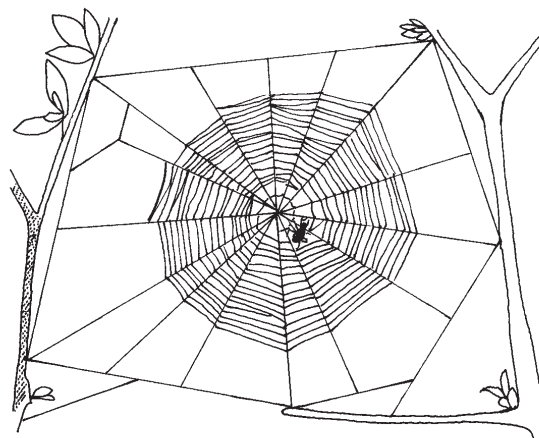
An interactive learning centre which opened in October 1998 in Guadalajara Zoo, Mexico was the first of its kind in Latin America. The learning centre has four interactive “modules” which encourage the visitors to touch, hear, feel and sense, and thereby learn through personal experience.

These modules are designed to use not only the sense of touch, but also vision and hearing. The specific subjects that are treated in these modules are: - Animal coverings-, in which the visitor can touch different kinds of furs, shells, whiskers, eggs, etc.

'**Tracks in the stone**', where a giant rock has several animal tracks encrusted in it, and so visitors can compare the size of each track with their hand; it also has a peephole inside through which they discover the owners of the animal tracks.

'**The sounds of the animals**' where visitors, through a phone, can listen to different animal sounds.

'**The Spider and its Web**', where the child or adult wears a special suit, pretending to be an insect, and then, through a swing, they will get stuck in a velcro spider's web. The object of this module is that the visitors can understand why it is so difficult for an insect to survive when it gets caught in a spider's web, differentiating it from the traditional spider's web games, where the child only plays with it, but never experiences the feeling of being caught. This is one of the most popular modules. (www.izea.net/education/journal38.pdf)



Exhibits in Zoos

Zoo exhibits play an important role in educating and entertaining the visitor.

Exhibits are designed to replicate natural environments with typically no unnatural mixing of species; specimens are chosen to give the best examples of the biological concept in an interesting and accurate way. The collections embrace diverse world-wide habitats. The ultimate goal is for the exhibits and programs to spark responsible actions in visitors.

Exhibits are of different types and are developed according to:

- taxonomical classification
- biome/biogeographical classification
- endangered or threatened species
- habitat diversity
- walk through exhibits

The design approach of exhibits help:

(1) simulate the animal's natural habitat, (2) produce an atmosphere similar to the animal's environment, (3) focus on the outstanding physical features of the animal, and (4) emphasize the ecological relationships between animals, habitat and man.

Immersion in Ecosystems: From Experience to Information

From static displays that showcase one or at the most a few species, zoos are now moving in the direction of developing exhibits that connect visitors with the natural world through interactive, exploratory micro environments. Such immersion exhibits allow visitors an opportunity to experience and interpret the complexity of an ecosystem and interrelationships within it.

Several zoos have created micro ecosystems like Tropical Rainforests, African Savannah, Desert, etc. complete with controlled climatic conditions and the typical flora and fauna. Immersing the visitors in this environment, creates a variety of interactive opportunities to explore, experience and understand what are often abstract concepts.

Burger's Zoo in Arnhem, the Netherlands has been focussing on visitor immersion in large scale, very naturalistic biotopes. The natural settings are used to provide an adventure expedition where visitors are made to feel like discoverers, making them alert, curious and open to take in a lot of information not only about botanical and



zoological aspects but also geological, climatic as well as other aspects. The zoo believes that to create spontaneous sensations in visitors is a primary condition for lasting education.

Johannesburg Zoo, South Africa has planned to create a themed layout. The theme is 'Explore Our Wild Places'. For this, zones are to be created with different themes. Once inside the zone the visitor will be immersed into the specially created environment and will explore with all the senses. Six zones are planned:

Heart of Africa

Spice Route

Southern Africa

Amazonia

Extreme Environments

Children's farmyard

Buildings are planned to be done in typical mud style of Africa with designs in earth colours, mosaic and mirrors; masks made from recycled drums.

Interpretive Signage is being developed to suit each zone with a certain theme: colours, jungle greens, yellows and browns.

There are also posters with a specific border signifying the zone. In addition to animal information, the text includes poetry to encourage reading and appreciation of language. (www.jhbzoo.org.za)

Chester Zoo

The interpretation at 'Spirit of the Jaguar' is multisensory and interactive since research tells us that visitors will retain as much as 90% of multisensory experiences. To reach as many visitors as possible, the interpretation was designed to be a fun diverse adventure, physically and intellectually accessible to all. Visitors are required to be active to gain information. With the Jaguar Cars-sponsored 'Spirit of the Jaguar' exhibit, Chester Zoos aims at immersing its visitors into the two natural habitats of the jaguar, open savannah and dense rainforest. Through this immersion experience, awareness about the threats of jaguars in America is intended to be raised. Several support-species add educational and conservation value as they share the same habitat as the jaguars in nature.

Visitors enter the building in the savannah area where large windows provide look-outs to the savannah indoor enclosure. The big central drum, themed as a Mayan Temple, is the entrance hall and belongs thematically to the savannah area. In this area the education focus is on threats and on the meaning of the jaguar for the Maya and Arara (indigenous people of the Amazon rainforest). Two terrariums provide display space for reptiles/amphibians, currently emerald tree boas and poison-arrow frogs.



Next, the visitors can discover the rainforest area in the second big indoor enclosure. Enclosure and visitor area are heavily planted with tropical vegetation to create a rainforest appearance. The contrast between the two different habitat areas is therefore obvious to the visitor. In the tropical area there is also an enclosure for leafcutter ants consisting of a big artificial tree trunk in a small pond. The inside of the ant colony can be watched through a glass window in the tree trunk. The pond holds butterfly goodeids, a mexican freshwater fish that is extinct in the wild. (www.chesterzoo.org)

Bronx Zoo

The Bronx Zoo's newest exhibit features 6.5 acres of shady forest, treetop lookouts, rock promontories, streams and wading pools, bamboo thickets, and sunny meadows -- all home to a wonderful collection of animals, including two troops of lowland gorillas. The Forest's dense and mysterious landscape comprises more than 15,000 plants, representing 400 species. It's innovative exhibits include the Congo Gorilla Forest exhibit. This 6.5 acre African rain forest exhibit highlights western lowland gorillas, okapi, mandrills, wolf's monkeys, black & white colobus monkeys, red river hogs, and more. Other outdoor exhibits are African Plains, Himalayan Highlands Habitat, Wildfowl Marsh etc.

The Congo Gorilla Forest is:

- The largest African rain forest ever built
- Big! The exhibit trail is nearly one-third of a mile long
- Home to Patty Cake, the first gorilla born in New York City
- Interactive, with high-tech, video, film, and CD ROM exhibits (www.bronxzoo.com)

Behind the Scenes

Vet for a Day

The interactive veterinary clinic opened in 2006 in Guadalajara Zoo, Mexico is an innovative example of involving children in learning more not only about what they see in the animal enclosures, but also to understand that a zoo needs to plan and cater for sick and injured animals.

The interactive veterinary clinic includes the same equipment the Zoo's veterinarians utilize in their daily procedures. This allows local children to become "Vet for a Day." With the aid of veterinary training "animals" (which are actually plush toys,) the children are immersed in a wildly different learning experience that they will never forget.

The children perform several different procedures on their "patients" from hearing the heartbeat of a rabbit to reviewing skin abnormalities caused by fleas. The children also use advanced diagnostic tools such as cardiac monitors to explore the differences in animal hearts. To end their experience in the veterinary clinic, the children observe a bone fracture in a dog. This leads to a discussion of the differences in care and veterinarian procedures of domestic and wild animals.

The inside look at a veterinary clinic is available for children of pre-school age through university level and their families in Guadalajara and the surrounding area. This clinic is just one example of the essential day-to-day educational support that the Guadalajara Zoo provides to teachers. Programs are constantly evaluated and updated to best complement and promote the area's environmental education curriculum and to reflect the Zoo's current collection. (<http://www.izea.net/education/programs.htm>)

Interpretive Gallery

Singapore Zoo has a Wildlife Healthcare and Research Centre with very advanced facilities and equipment including Laboratory, X-ray rooms, Surgery room, Pharmacy, etc. Rather than keeping this area "out of bounds" for zoo visitors, the zoo has used this as an opportunity to further engage and involve visitors. The centre has an Interpretive Gallery where visitors can get an insight into veterinary practices and cases. They can also witness the vets and laboratory staff in action. There is even provision of seeing live (via camera) surgery in progress. (www.zoo.com.sg)



Stick Insect

Singapore Zoo offers some other interesting “Behind the Scene” tours like a peep into the central zoo kitchen from where the specific food requirements of the different animals are catered to, or the Fragile Forest Tour where butterflies, scorpions, stick insects and other invertebrates for display are bred and maintained.



An interesting experience is offered to visitors to Barranquilla Zoo, Columbia.

Visitors learn about the practices for animal enrichment at the zoo. Visitors also get a chance to assemble toys for the animals, enter empty exhibits to hide special food for the different species, set up enrichment devices and find out much more about enrichment. Through the experience, visitors are introduced to the complexity of caring for wild animals and discover natural behaviours and skills of different species.

The Thrill of the Night

Night Safari

This is a unique experience offered by Singapore Zoo which claims that it is the world's first wildlife park built for visits at night. This is different from the concept of 'nocturnal houses' that several zoos have. In the latter case the night is artificially created to simulate condition for nocturnal animals to become active.

In the case of night safari the visitors get an opportunity to view nocturnal animals in their natural habitat in real time. This is especially attractive in case of tropical animals of which many are nocturnal. The visitors are taken on a guided tram ride which goes through a variety of recreated habitats from the Himalayan foothills to the Southeast Asian Rainforest, getting a chance to see their inhabitants. This is followed by a walking trail where they get a chance to view animals at closer quarters.

The Night Safari is an immensely popular family outing and gets an average of 1.1 million visitors every year. (www.nightsafari.com.sg)



Barn Owl

Interpretation

Any form of communication with visitors to facilities such as zoos usually involves two basic communication styles: Informational style, or an Interpretive style. The difference between the two styles is not what is presented but how it is presented. Informational styles may simply dispense the facts, the way a field guide lists and describes species, but the interpretive style reveals a story or larger message, to help the visitor relate to that message.

Interpretation thus is seen as an approach to communication. It is the communication path that connects visitors with the resources. Good interpretation is a bridge leading people into new and fascinating worlds. It brings new understanding, new insights, new enthusiasms, and new interests.

Interpretation is defined as “An educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information”. ... (Tilden Freeman, 1957)

In the case of Zoos, Interpretation programmes can be effective in converting the visit of increasing number of people into an educational opportunity, enhancing and enriching the visitors' experience by providing information through a variety of media.

Zoos around the world are using a variety of interpretive techniques to achieve one or more of the following:

- connect with visitors
 - provide intimate experiences that create emotional connections with animals
 - communicate more about wildlife, natural world
 - create awareness, and talk about an issue
 - create a memorable experience
 - to rouse the curiosity and sensibility of the visitor through dialogue, hands-on activities, contact with living animals or other practical events.
-

Some examples are given here:

Zoo Education cum Interpretation Centres

Such centres provide information on a variety of topics regarding wildlife, animal behaviour and characteristics and the role of the zoo. A variety of media like dioramas 2D and 3D models, sound exhibits, translights are used to make information exciting and to invoke a sense of discovery.

The Interpretation Centre can also be used as an extension facility and resource centre for various educational activities for the various target groups to the zoo like local communities, schools, colleges, NGOs, researchers and naturalists, tourists etc.

Touch tables are excellent educational techniques and can be set up using items that most zoos have available. These have real or replicas of eggs, skulls, bones, horns, antlers, skins, feathers etc which are displayed. Visitors are encouraged to touch and handle the items while interacting with the interpreter and discuss related topics.

How Do You Zoo?

How Do You Zoo at the National Zoo Smithsonian, USA is a wonderful exhibit of make-believe where children (and their parents or teachers) role-play zoo jobs. Children pretend to be zoo staff by wearing uniforms and completing tasks at numerous activity stations.

This hands-on discovery room has four sections: a keeper office, a zoo commissary, a veterinary hospital, and an animal exhibit. The room is usually open on Saturday and Sunday from 10 a.m. to 4 p.m. Occasionally, it is open on other days. (www.nationalzoo.si.edu)

Enviro Dome

The Adelaide Zoo, Australia is developing a state of the art, environmentally-friendly enviro dome, which will feature a special Discovery Centre to provide exciting and thought provoking learning experiences for zoo visitors of all ages. There will be living and non-living displays, interactive activities and information about sustainable building and living, the environment, animals and conservation. The Centre is expected to be an icon for Adelaide Zoo and set a new benchmark in zoo education. It is anticipated that about 85,000 children will visit every year. (www.adelaidezoo.com.au)



Live Interpretation

Nature Trails

Trails are one of the best ways to familiarize visitors with their immediate environment and nature, and expose people to the natural world. Exciting nature trails in the zoo can be developed highlighting various points of interest.

Interpretation along the nature trail route of animals, animal burrows, termite mounds, bird calls, plants and trees seen on the way maintain interest and invite involvement.

Trails could be guided as well as self guided.

On self guided trails all points of interest can be pointed out through road markers in accordance with the trail brochure; and trail wayside exhibits.

The Cincinnati Zoo and the Botanical Garden offers various types of **nature trails**, with experienced tour guides. Through these tours, visitors develop an understanding of wildlife, wild places and some of the environmental challenges that Earth is currently facing. These are tours offered for school groups. These are adaptable to meet the interests and skill development from first to twelfth grades.

Some examples:

Grades 1-12 Nature Trails

Adaptations Discover how nature works. Search for clues to discover how plants and animals survive in the wild. Observe the physical and behavioural characteristics that define a species and its role within an ecosystem.

Protecting Biodiversity: Wildlife in Danger Develop an awareness of the dangers that animals and natural habitats now face. Discuss how we can help solve the problems.

Insect World Learn about one of the most important groups of animals on the planet in our award-winning Insectarium. A live insect demonstration is included. A perfect cold weather tour. Insect tours are available Tuesday, Wednesday or Friday, September - December and February March and limited to 30 students.



Botanical Tour Learn how plants have adapted to compete for sunlight and water. Explore plant ecosystems on a tour through our African savanna, the Arctic tundra, mountain rain forests and a temperate bamboo forests (www.cincyzoo.org)

The Phoenix Zoo, USA has approximately 2.5 miles of walking trails. The Zoo has been divided into four different trails; the Africa and Tropics Trails that take about an hour each and the Arizona and Children's Trails take about a half hour each.



The Desert Trails offer an experience of seeing and exploring a desert ecosystem with its distinct flora and fauna.

Desert Discovery Trail: Take the Garden's main trail, a brick path, and learn the unique characteristics of desert plants from around the world. Featuring the Garden's oldest plantings, this 1/3 mile trail features a rich variety of displays and exhibits, and leads to all trailheads and facilities

Plants & People of the Sonoran Desert Trail: As desert dwellers, people interact with their surroundings, and this trail explores the many uses of desert plants for food, construction, tools, basket-making, and more. Twist agave fibers into twine and pound mesquite beans to make flour on this 1/3 mile trail.

Harriet K. Maxwell Desert Wildflower Trail: On this trail, one can see how wildflowers attract hummingbirds and butterflies (and people, too). Discover the beauty, colour, and diversity of wildflowers in North America deserts, and how they play a role in the desert's ecosystem.

Sonoran Desert Nature Trail: Change your point of view on this 1/4 mile trail, which features dramatic vistas of distant mountains and close-up looks at the surrounding desert. A variety of fascinating exhibits focus on both the plants and animals of the Sonoran desert.

Centre for Desert Living Trail: How do you live in harmony with the desert? This 1/4 mile trail provides helpful tips about desert landscaping, gardening, and conservation. Highlights include the vegetable and herb demonstration garden, Desert House, and Desert House exhibits. (www.phoenixzoo.org)

Habitat Trail at Kew Gardens

Explore and discover some of the fascinating plants and animals that live in the wilder places at Kew gardens, UK. The trail takes you on a journey through six different habitats in the Conservation Area at Kew and has been produced with support from English Nature. The Habitat Trail is aimed at Years 3-6 and links to the National

Curriculum science objectives. It is also suitable for parents with children aged between 7 and 11. The trail may be done as a whole or with small groups and the posts can be visited in any order. The whole trail takes approximately 2 hours although you can take a short cut if you have time restrictions. We have included ideas for extension activities that can be carried out back in school or at home. (www.kew.org)

Zoo Olympic Trail

Many zoos have created interactive trails including animal exhibits. Visitors are given a booklet at the zoo entrance and they compare their own abilities/characteristics to those of animal “record breakers”, as they move around the zoo.

For example there would be statements like:

The Elephant weighs about 3000-6000kgs. What would be your weight?

The Giraffes tongue is about 46-50cms long. How long is your tongue?

The Cheetah runs at top speed of about 115km per hour. What's your speed limit?

The Kangaroo can jump a distance of 84 metres and a height of 18 metres. Can you outdo the kangaroo?

In some zoos there are certain equipments at the different exhibits e.g. a weighing scale, measuring tape and colourful signboards.

Interacting with Animal Keepers

Animal Keepers have a wealth of information about the animal that they care for day after day. This can become an effective source of education for zoo visitors. Several zoos have a regular schedule for talks by keepers with specific timings for each of the animal sections. In many there are animal feedings that can be viewed by visitors. These are generally accompanied by a talk from the keeper. In some zoos visitors are allowed to join in the animal feeding.

Some examples:

Keeper talks at Taronga Zoo, Sydney, Australia

Free Flight Bird Show

This is held twice daily at 12:00pm and 3:00pm in the amphitheatre overlooking Sydney Harbour. Experience birds diving and swooping just centimetres above your head in this incredible display of agility and skill.

Giraffe Keeper Talk

Hear the expert keepers talk about these unique and fascinating animals every day at 1.30pm.

Kid zoo at Backyard to Bush

Get up close to some of our smaller Australian animals 10.30 am and 1.30 pm daily.

Reptile Talk

Discover the vivid beauty and survival skills of our reptiles at this interesting presentation held daily at 11.30am at the zoo. (www.zoo.nsw.gov.au)

Animal Feeding Times

San Diego Wild Animal Park, USA has an aviary where you can feed lorikeets, and puts on falconry displays. Many zoos with sea lions make a big event out of feeding time.

Edinburgh Zoo in Scotland has a popular penguin parade.

Token feedings, with live commentary by keepers, give an insight into the characteristics of the respective animals at the Singapore zoo. Visitors are encouraged to ask questions! The day's feeding timings may be picked up at the entrance of the zoo. There are different animal feeding times for different animals and visitors can purchase food on-site to feed the animal. (www.zoo.com.sg)

Denver Zoo has daily feeding and show times, and it is one of the most popular zoo events. (www.denverzoo.org)

London Zoo: Penguin Feeding time - At London zoo there are two penguin varieties. If you want to catch up with the penguins at their finest, plus find out a bit more about the care and attention they receive from their experienced keepers, make sure you get yourselves down to the penguin pool for feeding times. You will also be able to meet a member of the keeping team and "Ask the explainer" (www.zsl.org/zsl-london-zoo)

In addition to animal feeding as an interpretive opportunity, in some zoos animal encounters/demonstrations are held at an animal exhibit area or in a dedicated 'education' room/area in which visitors are shown certain animals, give a talk and ask questions. Close contact may also be possible in case of certain animals.



Signages

On-site Interpretation through Signages

On-site Interpretation provides visitors with information on specific and significant features they observe at a spot and makes one experience the subject. The on-site interpretation can be provided at locations frequented by visitors or at animal exhibit areas. Directional and facility/information signs also requires appropriate signage.

Signs can be used on-site for different purposes and can be of different types. They may be merely informative, some may be directed at visitor behaviour and others could be interpretive in the sense of attempting to enrich the visitors understanding of what they are seeing, using a variety of interpretive techniques, such as investigative challenge, 3D effects to feel or, in rare situations, moving parts.

Signages and wayside exhibits play a very important role in orienting the visitor to a place, and can highlight interesting aspects of specific exhibits as well as overall zoos.

Signs need to motivate the visitor to read and therefore while designing these, the visuals and the graphic element need to be strong and attractive. The information on the signs can be supplemented by interpretive talks, nature guides or self-guided tours.

Wayside Exhibits are used where more detailed treatment is needed. It may cover the total story of the site or actual display objects, sketches and charts, which may or may not be native to the site. It attracts visitors and will certainly entice them to see what is being presented. It allows for detailed presentation of a subject at a location where it can be most effective.

Signage can be of many types, including directional, exhibit headers, natural history, animal identification signs and interactive signs and sensitive subject signs.

A few examples are given:



Photo : www.izea.net/education/graphics.htm

Directional Signs

Directional signs are designed to assist visitors in orientating around the facility.



Photo : CEE

A creatively designed directional sign, which guides visitors in the Singapore zoo to get to the various exhibit areas. This sign has graphically recreated the animal types, the visitor will encounter.

Werribee Open Range Zoo Zoos Victoria Victoria, Australia



This themed graphic directs guests towards points of interest, such as gift shops and restaurants.

Rotterdam Zoo The Netherlands



To support the natural design of the Rotterdam Zoo, the zoo created its own natural looking directional signs. Each direction is depicted by a pictograph and words. More commonly sought after locations are listed at the top of the sign.

Materials: Redwood
Cost: € 200,00

Melbourne Zoo Australia



The Bong Su Conference Center is located in the middle of the "Trail of the Elephants" experience. Many signs are located along the walkways leading to the conference center.

Created: In-house.

Photos : www.izea.net/education/graphics.htm

Exhibit Headers

Exhibit headers are used to introduce an area with bold graphics and creative images. These signs should draw visitors into an exhibit.



Photo : www.izea.net/education/graphics.htm

An exhibit signage which shows the location of the 'critter animals', and has also graphically depicted what animals can be seen in this area. The simple yet aesthetic design is eye catching and informative.

The exhibit area on seals has these signages which have tried to recreate the colours of the 'aquatic habitat'. Catchy titles and designs enthruse the visitor to read the sign.



Photo : CEE

Rotterdam Zoo The Netherlands



This sign identifies the Chinese garden. Each time guests enter a new habitat, they are greeted by a new circular habitat sign.

Photo : www.izea.net/education/graphics.htm



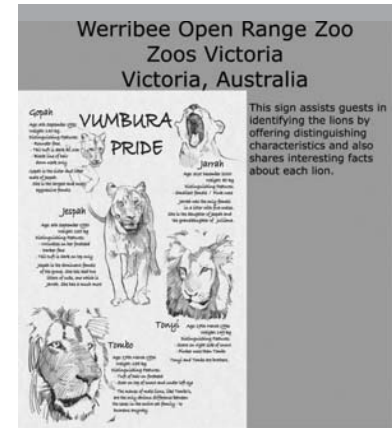
Signage identifying the different kinds of bears in the world at Singapore Zoo



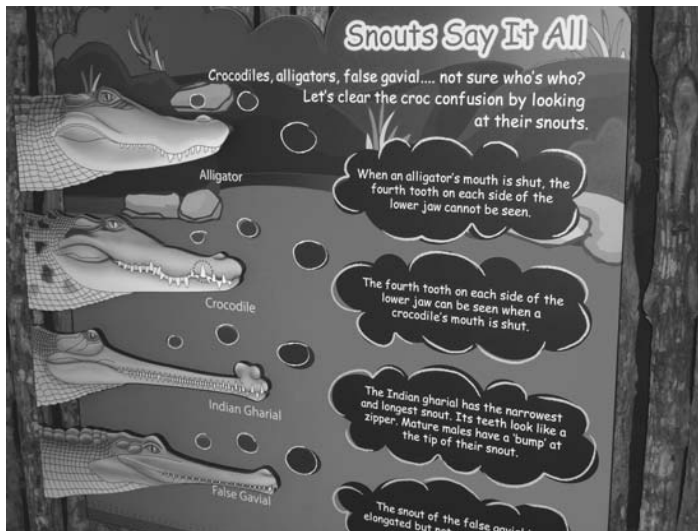
Photo : CEE

Animal Identification Signs

Animal Identification signs offer visitors basic animal information such as scientific name, niche, diet, range and life span.

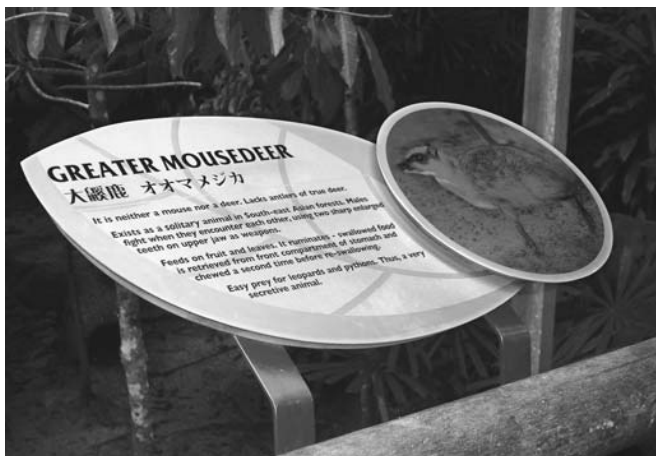


Photos : www.izea.net/education/graphics.htm



Photos : CEE

Signage on the types of snouts in crocodiles, which has been depicted interestingly with cut outs of the snout types along with information, distinguishing these crocodiles



Photos : CEE



A different design style which is eye catching and attractive to the visitor. The signage presents information about the animal, in a style combining graphics and text in an interesting manner.

In the area where giraffes are seen, these signs have been developed in the shape of giraffes head, giving an identity to the signs and the animal being interpreted. These signs give interesting information about the animal.



Photos : CEE

Interactive Signs

Interactives allow visitors to get involved using their senses and/or an activity.

Photo : CEE

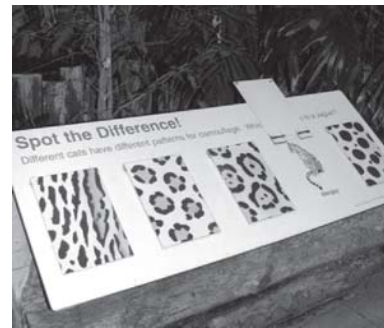


A live size interactive sign, where visitors can measure their heights and gauge how tall the polar bear is. This sign attracts visitors of all age groups.



This flip-book talks about animal adaptations.

Photos : www.izea.net/education/graphics.htm



This is one example of interactive signage at Chester Zoo. Lifting the flap uncovers information telling the visitors if they were right or wrong when thinking about an answer to the question given.

Conservation Message signs

Conservation messages inspire visitors towards action to conserve our wildlife and wild places.



London Zoo United Kingdom

where have all the birds gone?

Large numbers of our favourite garden birds are dying from disease.

One of the main causes of death is salmonella which is being spread through droppings on bird tables.

The problem worsens in winter when food is scarce and birds tend to gather on a few well-stocked bird tables.

They're killed themselves by eating food contaminated by infected droppings and then in their weakened state become vulnerable to the cold.

ZSL scientists are working together with DEFRA to investigate the problem and find out why birds such as goldfinches, chaffinches and housemartins are affected.

This graphic discusses some threats to local bird species and some ways guests can help the birds.

You can help birds in your garden avoid disease:

- Clean the bird table regularly
- Make sure the food and water is fresh

Zoological Society of London London, England

where have all the birds gone?

Large numbers of our favourite garden birds are dying from disease.

One of the main causes of death is salmonella which is being spread through droppings on bird tables.

The problem worsens in winter when food is scarce and birds tend to gather on a few well-stocked bird tables.

They're killed themselves by eating food contaminated by infected droppings and then in their weakened state become vulnerable to the cold.

ZSL scientists are working together with DEFRA to investigate the problem and find out why birds such as goldfinches, chaffinches and housemartins are affected.

This sign informs visitors of recent successes in conservation.

**LAIVING CONSERVATION
Recent Successes**

The Living Seas with Nemo and Friends Epcot Florida, USA

Did you know:
367 million gallons of oil runoff end up in the ocean every year.

What can you do?
Promptly repair leaking vehicles and locate an oil recycle center in your area.

This graphic highlights threats to the oceans and actions that everyone can take to make a difference.

Did you know:
Every year millions of animals are injured or die when they become entangled in monofilament line.

What can you do?
Always remove your line and properly dispose of it in a monofilament recycle bin. Cut the line into four six inch pieces before placing in recycle bin.

Photos : www.izea.net/education/graphics.htm

Singapore Zoo map





Toronto Zoo map

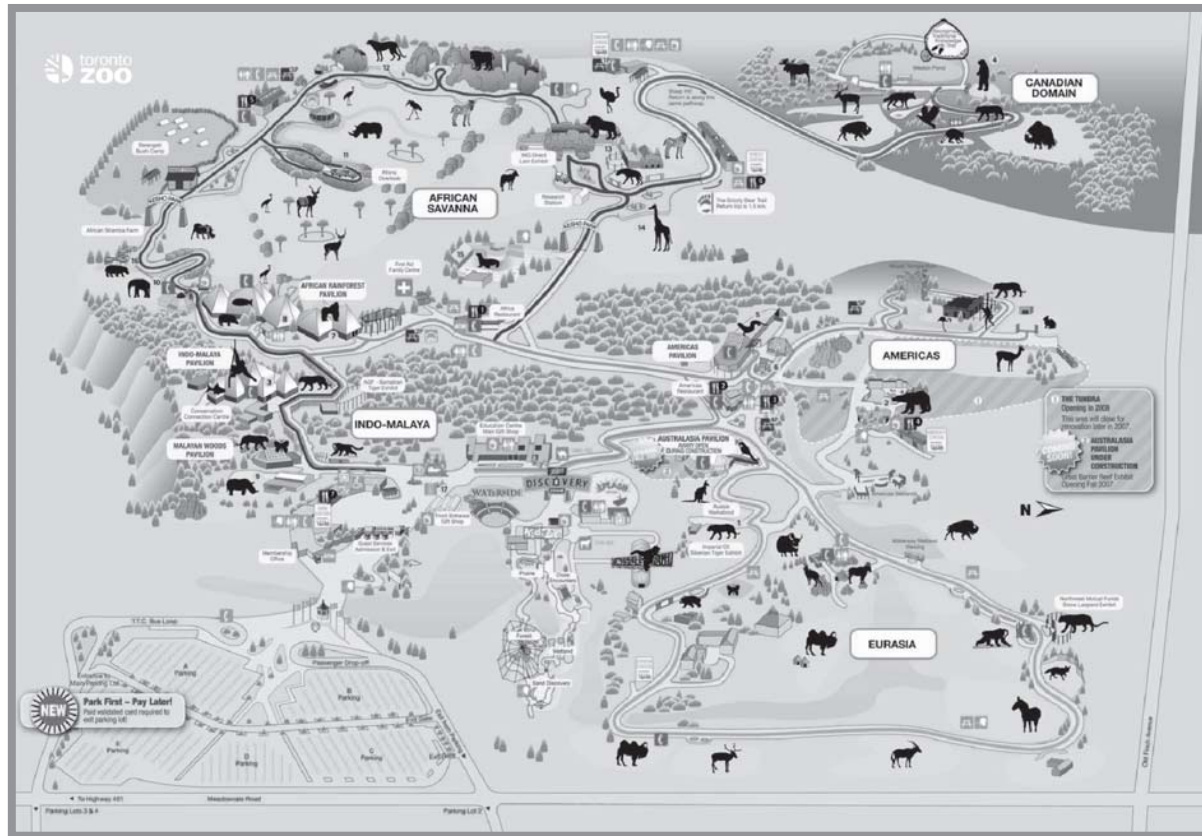


Photo: www.torontozoo.com.sg

Entrance Signages



Entrance signage at the Cincinnati Zoo and Botanical Garden

Photo : <http://www.flickr.com/photos/thaddfiala/1608280699/>



San Diego zoo entrance sign, with a sculpture of an elephant

Photo : http://en.wikipedia.org/wiki/San_Diego_Zoo



Photo : http://goflorida.about.com/library/bls/bl_photo_lowryparkzoo.htm

The entrance to Lowry Park Zoo, Florida sets the stage for the exhibits inside



Entrance signage at the Singapore Zoo

Photo : CEE

Signage for Special Needs

Zoos need to take into account not only the average visitors also provide for special needs-such as visitors with disabilities, children, illiterates etc.

For example Los Angeles Zoo provides sign language interpreters large print maps, Braille information, and assistive listening devices on request.

Many zoos put up temporary signs to suit the seasonal happenings. For example when a particular species of tree is flowering, or any other noticeable feature of the vegetation on the zoo campus.

Or a sign may be put up to announce an animal's birthday, or a new arrival or birth in the zoo.

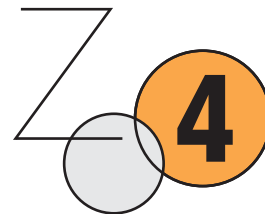
Signage may also be put up to draw visitors attention to out of enclosure animals, such as squirrels, kites, migratory birds, butterflies etc. These are best located at places where visitors stop to rest or eat and are not focused on any particular animal exhibit.



Indian Striped Squirrel

Zoo as an Outdoor Classroom

Sensitize, Inform, Teach



Linking with Formal Educational Systems

In addition to the large numbers of children that visit zoo as part of family groups, zoos are also regularly visited by 'student groups' ranging from kindergarten students to students at the university level and researchers. Most of the times, these visits are undertaken as part of an annual 'outing' for the students, and are usually occasions for enjoyment. The tremendous educational opportunity for this kind of outing is often overlooked. In fact, the array of educational possibilities offered by a zoo visit is inexhaustible. To use such opportunities, and to provide facilities and services to optimize the opportunities requires a proactive approach and planning both on the part of the school authorities (management, and especially the teachers), and the zoo authorities (management as well as zoo staff.

This section looks at a variety of programmes offered by zoos to address this opportunity and need to extend the formal classroom.

Formal zoo education thus comprises education that is conducted in the framework of the educational curriculum of schools, colleges etc. within or in relationship with the zoo.

Guided Tours for School Groups

These are offered as structured zoo visits guided by a zoo educator and are offered by many zoos. In most the tour includes a bus trip round the zoo, some behind the scenes visits, and some close encounters with animals. Most zoos also offer a menu of specific themes/topics that can be discussed with students. These are planned so as to be suitable to the academic level of the students i.e. Primary level, and Secondary level. In some zoos, the school visit programme is designed so as to closely link with the topics covered by the formal curriculum. Bristol Zoo offers such programmes (www.bristolzoo.org.uk)

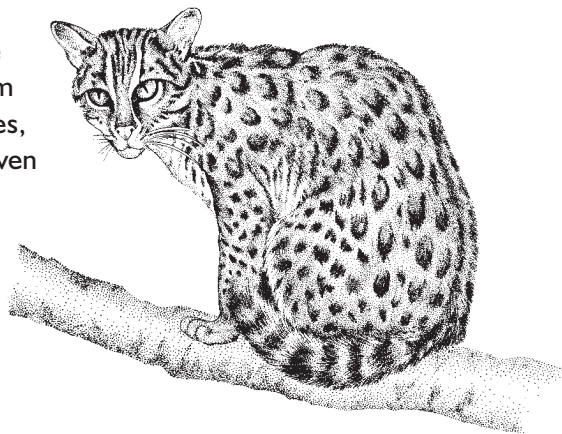
The themes that are most offered, and also most suited to the opportunities to observe live animals, relate to size and shape, form and function, classification, body coverings, animal senses, locomotion, adaptation, teeth and diet etc. These are attractive even for the very young students.

At a slightly older stage, the programmes bring in the themes of habitat, ecosystems, and conservation.

The Bristol Zoo, UK offers a walk and talk tour for students over 16 years, on themes such as the history of the zoo, the role of the modern zoo, conservation and endangered species.

All these programmes are conducted (by the zoo education staff) in an interactive participatory mode, including a chance for the students to observe, ask, find out, discover and carry out hands-on activities.

The detailed information about the programmes being offered, including the contents, methodology, schedule and fees are put up on the websites of the respective zoos. The school visits have to be booked in advance.



Leopard - Cat

An example:

San Diego Zoo Guided Tours

School groups are entitled to free or discounted admission to the Zoo. [Click here for admission rates](#). Many school tours are available in Spanish. Reservations are needed: call (619) 557-3962 or 557-3963.



Length: 2 hours Maximum: 40 participants Fee: \$200. Add group admission rates if you are out of San Diego County.

Most school groups respect our animals and property. Please familiarize yourself and your group with our rules before coming to the Zoo to make your visit run smoothly:

- Grades Pre-K6
- Grades K12

Pre-ordered lunches are available at the Zoo. Each lunch includes: animal cookies, chips, a drink, and your choice of a hot dog or chicken strips. Lunches can be ordered at the time of your field trip reservation or at least one week prior to your visit date.

Guided tours

Grades K6

Once Upon a Time this educational adventure begins with a special animal story: Best Beak in Boonaroo Bay for grades K3 and The Iguana Brothers for grades 3-6. Then it's on to the Children's Zoo for a meeting with an animal. Students will do some food prep work and even hand-feed a critter as part of the theme of animal diets and adaptations. Literature/Life Science

Grades K12

The Inside Story Students learn the fundamentals of running a zoo: animal health care, exhibit design, feeding, breeding, and more via an exclusive bus tour. A Zoo educator, ready to answer your students' questions, will provide up-close animal encounters and behind-the-scenes visits. Life Science/Careers

Grades K8

Whodunit? There's a mystery afoot and it's up to students to help discover which Asian animal has disappeared and who is responsible. The program provides a wealth of information about the Zoo's collection of Asian animals. Students will visit various locations to collect clues about the nine suspects and have a close encounter with an Asian animal, Life Science/Conservation.

Dr. Harry's Time Machine Dr. Harry Wegforth played an integral part in the creation of the Zoo, and students will "travel through time" to learn all about who Dr. Harry was and how his influence still guides the Zoo today. Visits to historical animals and exhibits help demonstrate the important relationship between people and the animal world and how we can improve it.

Grade 2

Free guided visit Second grade classes in San Diego County are invited to participate in a FREE guided visit at the San Diego Zoo. Dr. Harry Wegforth, the founder of the San Diego Zoo, dedicated the Zoo to the children of San Diego. In honour of this dedication, the free second grade program has been a long-standing tradition at both the Zoo and Wild Animal Park. The program includes a bus tour and an animal presentation. This special program is very popular among teachers who are "in the know" so reservations are required and must be made early in the school year!

Length: 1.5 hours Maximum: 70 participants Fee: FREE. Add group admission rates if you are out of San Diego County.

"I loved the tour bus ride, the life cycle assembly, and all the other wonderful things you showed us! My most favourite animal in the world is a giraffe! I love the Zoo!" - Sophia, 2nd grade student.

(http://www.sandiegozoo.org/teachers/guided_zoo.html)

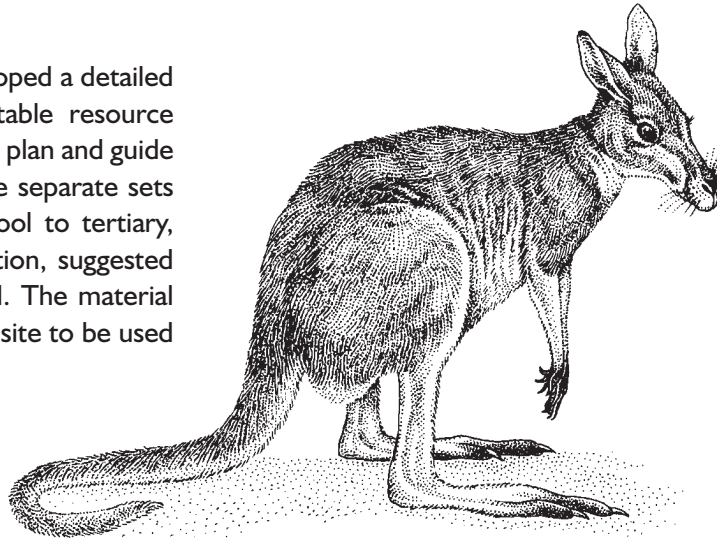
Many zoos offer a free pre-visit to the teacher to see the facilities first hand and to plan the visit along with the zoo staff.

Teacher Guided Visits

In addition to the zoo education staff providing tours and educational sessions, many zoos provide the teachers themselves with the resources needed to conduct the zoo visit by themselves, so that they can include a lot of learning with a lot of fun.

Many zoos have a menu of such programmes which teachers can choose from to suit their level and theme specific requirements. These are usually planned so that they link with the formal school curriculum.

Adelaide Zoo, Australia has developed a detailed set of guidelines as well as suitable resource material for teachers who want to plan and guide their own student visit. There are separate sets for different levels from pre-school to tertiary, each with the necessary information, suggested structure and supporting material. The material can be downloaded from the website to be used by teachers.



Kangaroo

Some examples:

Exploring the Adelaide Zoo with Pre-schools

For the Teacher

General Information

Welcome to Adelaide Zoo! The Zoo is a great place for learning. The Adelaide Zoo Education Service aims to support children learning by providing resources to assist classes to have educational and enjoyable learning experiences at the Zoo.

This booklet will provide a range of activities which may be undertaken by your children during their visit to the Zoo. A map is provided to help supervisors, and for each theme, animals are listed in an order which should give a logical circuit to travel during the visit.

Animal species do change from time to time, and sometimes animals are "off limits" or out of sight during visits, so a flexible approach to completion of activities is recommended.

In planning, please consider whether:

- you would like your class to regroup for lunch, animal feeds, or at the gate at the end of the visit. If so, relay the times and meeting places to supervisors (in writing if possible.)
 - you would like to use the Nocturnal House: if so, book a time when making the Zoo booking so your students are not disturbed by other school groups.
 - you would like to use the Biodiversity Room. This room in the Education Centre contains numerous animal artifacts such as skins, bones, preserved specimens, confiscated items taken from tourists etc. It will support a variety of study themes with a hands-on experience for students. If you wish to use this room, you need to book it when you organise your class booking.
-

- you would like a session with a Zoo Education Officer to support your study theme. Lesson requests are met wherever possible, though at busy times of the year you may need to have a few options with dates to enable a time to be negotiated. Again, this time is booked at the time of booking your class visit.



If your class is not booked in to a program involving an Education Officer, we will attempt to meet your class at the gate on arrival at the Zoo. At this meeting the group will be welcomed and given some information about the Zoo to assist their visit. General behaviour expectations will also be outlined.

Specific information relating to this Zoo resource will follow for the teachers and for adult supervisors. Please ensure that supervisors have a copy of the relevant pages before they come to the Zoo so they can also be mentally prepared to maximise the learning for the students in their care.

Plan A - Starting at the back entrance

10:00am	Arrive at Zoo
	Welcome by Education Officer and have recess at tables in Children's Zoo area
10:20am	Children's Zoo
	<ul style="list-style-type: none"> - viewing animals in fauna park, etc. - feeding deer in contact area. - looking through rest of Children's Zoo
11:00am	Education Centre
	<ul style="list-style-type: none"> - deposit bags - visit Biodiversity Room
11:30am	Walking trail in groups - look and talk about the animals.
12:35pm	Lunch at lawns near Rotunda
1:00pm	Watch Macaw free flight on the central lawns
2:00pm	Leave Zoo

Plan B - Starting at the back entrance

- 10:00am Arrive at Zoo Recess in Children's Zoo eating area
- 10:15am Children's Zoo
 - walk through, see animals in fauna park, contact area etc.
 - pat /feed deer.
- 10:45am Education Centre
 - deposit bag
 - Education Officer talk on theme
- 11:15am Walking Trail
- 12:30pm Lunch on Rotunda lawns
- 1:15pm Nocturnal House
- 1:30pm Leave Zoo

Plan C - Starting at the front entrance

- 10:00am Arrive at Zoo Recess at Rotunda lawns
 - 10:15am Education Centre - deposit bags - visit Biodiversity Room
 - 10:45am Walk through South East Asia trail.
 - 11:45am Nocturnal House
 - 12:00am Walking trail continued
 - 12:40pm Meet at lawns near Rotunda for lunch
 - 1:00pm Watch Macaw free flight
 - 2:00pm Leave Zoo
-

Notes for Supervisors & Teachers

Who's who at the Zoo?

The prompts below are in roughly a “good walking trail order”, but with some animals (e.g. the stripiest) the contenders are widely spread, and children will need to recall the earlier ones. To visit all these animals will cover most of the zoo. If time or energy is limited, just map out a selection of items to focus on. If the animal is hiding, just leave that one there are plenty of others to look at.



Brainstorm:

What animals do you expect to see when you come to the Zoo?

Some Zoo animals are very famous because they are so different to the animals that we have as pets or as farm animals. Can you think of some wild animals that are very different from other animals? How are they different?

Finding the extreme animals: Who is the “mostest?”

Tallest (Giraffe)

What is the name of these animals?

What do you think they eat in the wild? Why do you think so? Can you see their tongues? These animals have probably got the longest tongue of any animal also (except maybe whales!)

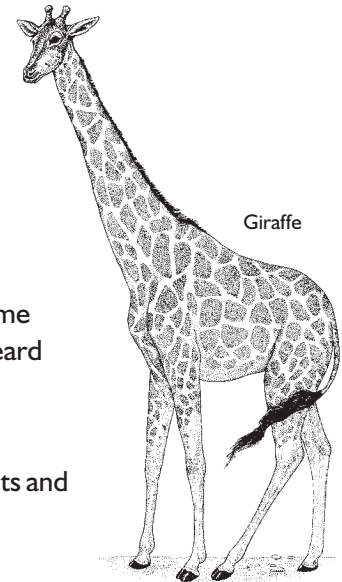
Best laughier (Laughing kookaburra)

Near the Giraffe area, opposite the house, which is the Volunteers Centre, are some aviaries. Can you pick a bird out of these which is a great laughier? Have you ever heard them laugh? Can you laugh like them?

Spikiest (Echidna - in the Nocturnal House)

Can you find a very spiky animal in the Nocturnal House? Do you know what it eats? (ants and termites.)

How do you think the keepers pick it up when they have to move it?



Peccaries at the end of the path past the hippos and pygmy hippos.

Can you see the Collared peccaries that look a bit like pigs? Do they look soft to touch or not?

Do you think the Echidnas or peccaries would be the spikiest to touch.

Busiest (Spinifex hopping mice - *Nocturnal House*)

In the Nocturnal House, once you have gone past the aquaria and entered the main room, you will see the enclosure on your right.

What are these animals? Watch how fast they move. What are they doing? Are they the busiest animals you have seen? (Common Shrew)

On the **outside** wall of the Nocturnal House, opposite the bird aviaries are some glass-fronted enclosures. Can you see some very busy animals in here? Do you think they are as busy as the Hopping mice?

Exploring the Adelaide Zoo

Secondary Mathematics at the Zoo

Teacher notes - Mathematics trail

This trail will provide students with opportunities to use Mathematics to solve problems in a work environment the Adelaide Zoo.

It aims to

- encourage the use of different mathematical skills, e.g. Estimation, arithmetical calculations, financial costing, graphing, scale diagrams, probability and mensuration in solving realistic Zoo-related problems.
 - broaden students' knowledge about the complexity of managing a zoo. Not just in terms of looking after the animals, the zoo environment and resource usage, but also the transfer of animals between zoos, addressing conservation issues and other aspects of zoo business.
-

- Relate the mathematical skills and thinking to realistic problems.

The booklet is designed for group work with groups of 2-4 recommended. Some of the activities require deep thinking, broad general knowledge or a large number of independent estimations and calculations. These things are more achievable in a team situation. Teamwork in navigation, organisation and writing will also add to students' involvement, learning and enjoyment of the trail.



Some of the activities can be done in the classroom. Some need to be done at the Zoo. Some require information and ideas to be collected at the Zoo, but need to be completed in the classroom. It is probably good to select the activities that you think are most suitable for your class: you could give students a choice of activities to do at the Zoo, a choice of those that need to be completed in school and perhaps the Zoo Poo exercise could be done as a class activity.

Activities to complete at the Zoo

- Hosmer's skink proportions & scales
- Meerkat behaviour
- Hippopotamus pool water
- Ocelot issues

Activities which require information collection at Zoo and completion at school

- Enclosure design
- Lion enclosure material costs

Activities which could be completed entirely at school

- Probability of preferred sex in lion cubs
- Meerkat population growth
- Graphing the Zoo population

- Wages of Zoo workers
- Estimates of food and poo at the Zoo.

The activities are discrete, and omitting any particular ones will not impact on the others.

Two blank pages are included at the end to allow more room for notes and calculations: for many of the activities there is not sufficient room on the page to enable detailed answers or calculations. You may want to select the tasks your class will use, add an extra page after each and staple it together as a workbook.

Pre-visit ideas

- Seat the students in the work groups they will be in at the Zoo. They should read through the various activities that they will be doing, and perhaps choose which activities to do depending on how you wish to organise the day. They should discuss and plan out their route, approach to the tasks and individual roles on the day of the excursion.
- Discuss and experiment with ways of estimating things like length or mass. e.g. Hand spans, arm span, paces to estimate length or margarine packs, 5kg bags of potatoes, calculators to estimate mass. Students may be able to accurately measure some of these things and to work out how to use them easily in practical situations.
- Encourage students not to be too fussy about estimations they need to find a balance between wasting too much time and obtaining an estimate which is useful.

Post visit ideas

- Complete tasks, especially those that required data or information at the Zoo, but equipment at school to do a good job. E.g. Lion enclosure costs, enclosure design.
 - Undertaking tasks which did not require direct Zoo observations, e.g. Wages costs, Meerkat population growth,
 - Class activity Food and Poo at the Zoo. Students at this stage should have seen a lot of zoo animals up close enough to be able to estimate how much food they need in a day. They may have seen many of their
-

poos and have an idea of the mass produced each day etc. With many brains contributing, and using the figures provided, they should be able to come up with some estimates that will provoke further thought.



Teacher / Supervisor / Student notes for the Mathematics Trail

This trail is designed to be completed by groups of 2-4 students, sharing ideas and jobs.

It is advisable for groups to start working on different activities at different locations. Decide before you start how your group will tackle the tasks on the day.

Read through the tasks carefully and discuss the best way of going about them before starting. Ensure that you answer questions in sufficient detail and show your mathematical workings. If there is insufficient space for this on the activity page, go to one of the spare pages to complete answers.

- For some of the more complex tasks, which will be completed back at school, make sure you gather all the necessary information from the animals / enclosure / signage before you move on.
- Where estimations of length and mass are being made, don't get bogged down by being too fussy. Discuss within the group the best way of getting a reasonable estimation in a reasonable time.
- Make good observations of enclosures as well as animals. Notice how the enclosure prevents the animals from escaping. Notice where the off-limits area is, and how the keepers are able to enter enclosures or to capture animals safely.
- Also, notice the type and quantity of food which may be visible, and how it is given to the animals. See if you can see any faeces (poo) around the enclosure. Could you estimate its mass (weight?) How many times a day do you think particular animals "go?" Would it depend on their diet?

Key

Observe carefully

Discuss and share ideas with your group

Write down your thoughts

Challenge question

Did you know?

Calculator will help here

Designing an Enclosure

Background : Fifty years ago, zoos were “menageries”, with as many species as possible housed separately in small, concrete cages with bars in front. In most cases the needs of the animal were not met, and animals were stressed, often dying young or failing to reproduce or to raise young successfully. Conservation and extinction were not ideas which occurred to people often as there were still large areas of most ecosystems on the Earth and large wild populations of most species.

Modern zoos are very different. Conservation and good animal management are the highest priorities. This means that when enclosures are designed and built the animals' needs, in terms of appropriate social groupings, space and behavioural requirements (trees to climb, places to dig, things to do which utilize senses and brains,) are considered. Often several species, which occur in the same habitat in the wild, are located in the same enclosure.

At the same time, the needs of the zoo staff must be catered for: the enclosure must be safe to work in, easy to clean and maintain, and the animals must not pose a danger: night quarters enable animals to be caught safely, and with little stress, for transport or health checks and also allow cleaning of day enclosures to occur safely.

Zoo visitors provide a large share of the Income for the Zoo so their needs must also be met. Good viewing positions, aesthetically pleasing enclosures and appropriate signage and information needs to be provided.

Teaching suggestion: Groups could pick the animal they will use at the Zoo and write down relevant information using observations, signage etc. They can then do the drawings back at school, manually using rulers etc, or perhaps on the computer, using CAD or drawing programs.



Task

For an animal of your choice, list all the things you can about its needs in terms of the enclosure it lives in its structure, size and extra features needed for behaviour enrichment.

Your observations and the signage will help you to do this. List also the needs of the Zoo staff and the needs of the public with respect to the enclosure.

Sketch the main features of an enclosure which would be good for these animals, staff and public mark in any features such as trees, rocks, ponds, perches, night quarters, hot (electrified) wires, sprinklers, heaters, etc. Indicate how many animals will share this space and what the make-up of the group will be.

Back at school, draw a neat scale diagram of the enclosure, labelling all the important features directly or with the use of a key. Mark the scale on your design.

Adaptations Trail- Primary

Teacher's Information

Consider the amount of material in this trail, the time you will spend in the Zoo and the age and capacity of your students. You may like to put the activities in order of preference, make a selection from the activities for your class or share the activities amongst groups so each group does say 4 or 5 activities.

Pre-visit ideas

- Research an animal. Find out about its natural habitat, predators, food source and the adaptations it has to help it survive.

- Collect recycled materials and use these to construct habitats.
- Write letters to wildlife protection programs, local councils or newspapers.
- Consider the food chains of various regions and find out what happens if one of the species disappears. Look at the adaptations each animal has to help it find and eat its food.
- Make a list of all the adaptations humans have and how they help us.
- Design and implement a recycling program for the school/community/home.
- Group animals into the habitats that they come from, then compare adaptations that they have.
- Write one day of the diary of an animal, explaining how it uses its paws/teeth/claws or other adaptations in everyday life.

The following words and terms would be useful as prior knowledge to your visit to the zoo:

- Threatened Species
- Habitat
- Adaptations

Post visit ideas

- Design an enclosure for a Zoo animal, considering its needs and natural habitat. Construct the enclosure using recycled materials.
- Collect newspaper articles related to animals
- Research what wildlife organisations and Zoos are doing to help Threatened Species.

Assessment Ideas

The questions and tasks in the trail are designed to encourage original ideas and thinking. There is not necessarily a correct answer for each question. In most cases answers should vary from group to group, indicating independent thinking.



Other ways to assess the students work on this topic could include:

- Writing a report about the visit to the Zoo.
- Giving an oral presentation on the adaptations of their favourite animal.

Adaptations

When walking around the Zoo today, look closely at the animals and their surroundings.

Adaptations are things about animals which make them better suited to the environment that they live in, and more likely to survive. There are 3 ways that animals are adapted.

- Behavioural adaptations
- Body structural adaptations
- Bodily function adaptations

Fill in this table when you are in the Zoo today.

Animal	Need	Adaptations
Siamang	To reach the fruit in the trees	
	To stay cool in the desert	Nocturnal- comes out at night time
Lion		
		Webbed feet
	To stay warm in the cooler weather	

(<http://www.adelaidezoo.com.au/files/>)

Resource Material

Given below are examples of some resource materials. In this case part of the material is for teachers, and part is to be used by teachers to involve students in the learning experience. Resource material helps support student learning by providing facts, information and activity guidelines. All these are specially designed so as to transform a visit to a zoo into an educational and enjoyable learning experience.

As seen the supporting material can be for the teachers as well as students, and can include detailed guidelines on what to do, as well as fact sheets and worksheets for students. Many zoos have education specialists that develop these resources.

Activity Kits: ARAZPA has developed activity kits to assist primary school educators to develop an awareness and appreciation of Australian wildlife and the environment through a variety of stimulating "hands-on" activities. Kits are available on a selection of themes such as Frog Kit, Endangered Animals. Depending on the theme the kits contain foam animal shapes, music tapes, simple puppets, animal toys, puzzles, videos, CD ROMs, books, teachers' resources and games. The kits can be used independently, or as a pre or post zoo visit resource. The kits are given on loan (at a prescribed fee) to the interested schools/teachers for a period of 4 weeks. An evaluation form is also sent with each kit.

The kits are popular and are booked up almost round the year.

(www.arazpa.org.au/Environmental-Education)

San Diego Zoo also provides Classroom Kits and Activity Sets for use in connection to zoo visits, but also for classroom use. Also on offer are curricula and lesson plans that teachers can download and use.

One example:

Who Am I? (Grade 2)

A lesson submitted by Mrs. Ramirez-Raab

Valley Center Lower Elementary School, Grade 2

Purpose

To encourage children to ask good, meaningful questions to identify animals that may be seen or have been seen on a visit to the San Diego Zoo or the Wild Animal Park, or any zoo or aquarium. Teaches some basic taxonomy (grouping) of different animal groups.

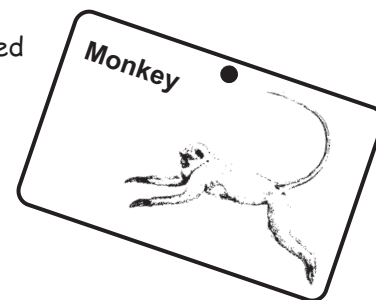


Materials

- Postcards of animals or pictures of animals cut from magazines and mounted on index cards
- Yarn
- Hole punch

Preparation

Make a long necklace with the postcards/animal pictures and strands of yarn.



Activity

1. Hang one card around each student's neck, so that the picture is face up on the student's back. Be sure the student cannot see his or her animal picture.
2. Students are instructed to ask one question of each of the other students, one question per student, in an attempt to identify the animal they have on their back. Questions must have a "yes" or "no" answer ("Do I fly?" "Am I covered with fur?"). You may want to practice asking questions with the students before the activity begins.
3. How long does it take for each student to learn their own identity? Which questions gave the most information? Did it make sense to ask questions like, "Am I a lion?" at the beginning of the activity? Were questions like "Do I have fur?" or "Do I live in Africa?" better to start with?
(http://www.sandiegozoo.org/teachers/classroom_activities.html)

Workshops for Educators

Well-researched, well-designed resource materials are a great help to teachers who are hard-pressed with numerous demands on their time and energy.

Sometimes a good way to reenergize teachers is by transforming them into the learners, and giving them a chance to learn by doing, in order to more effectively apply the learning in their own teaching contexts.

Some zoos offer workshops specially for teachers to provide them with an opportunity to participate in an active, hands-on teaching-learning experience.

The Brookfield Zoo in Chicago has an interesting menu of classes and programmes, for teachers of all subjects and levels. The workshops range from purely academic, e.g. 3-day workshop on In-depth Inquiry or Critical Thinking to exploration of ecosystems e.g. wetlands or oceans, to use of literature (animal stories) and science (genetics). (www.brookfieldzoo.org)

Another example:

Teacher Training

About Our Training Programs

Would you like to spice up your teaching with exciting lessons on wildlife and conservation?

Are you looking for fun, interactive activities that correlate with your state standards of learning?

- We offer a wide variety of training opportunities on an annual basis, ranging from basic one and two day courses in technique and tools to enhance classroom learning, to advanced institutes where participants learn side by side with Smithsonian scientists the principles and practice of biodiversity, environment, and wildlife research and conservation.
 - Instructional materials, lessons, and exercises emphasize authentic student inquiry during instruction, and are rooted in National Zoo strengths in conservation science.
-

- Our programs are designed to increase teachers' confidence and skills to enhance classroom learning with innovative, hands-on, research-based activities, both in the classroom and in the field.
- An exciting two-month summer teacher fellowship immerses you in the world of our science and animal program staff, and offers you the chance to create a lesson plan or curriculum activity to take back to your school and your students.
- Our goal is to build capacity in schools where meaningful, outdoor-based science and environmental education is a natural part of the culture for teaching and learning.
(<http://nationalzoo.si.edu/Education/TeacherWorkshops/>)



In Belize 4 EE manuals were developed collaboratively by the Belize Ministry of Education, The Belize Zoo and the Peace Corps Belize 1990-1994. But there was a dire need for teachers to effectively interpret and transfer the information contained in each of these resource manuals. Recognizing this need, Belize Zoo initiated regular teacher's summer workshops to assist teachers in the interpretation of contents of the manuals and to demonstrate how they could be integrated with the existing curriculum. These have been successful and have attracted teachers from all over the country. The workshop now includes a Teacher's Study Tour where teachers are taken to field for hand-on learning experiences. The feedback and evaluation of these workshops demonstrate that the experience has been useful for teachers as inputs into strategies and ideas for their teaching. (www.belizezoo.org)

Work Experience for Students

Adelaide Zoo every year accepts students in standards 11 and 12 to do a week of work experience with animal keepers. The students assist the keepers in their tasks, including cleaning and maintaining enclosures, preparing food and feeding animals, and observing animals. The schools are sent information at the start of the school year, and interested students apply for the positions. This work experience programme is very popular and hundreds of students apply for positions. (<http://www.adelaidezoo.com.au/>)

Zoo School Open Minds School Programme

Calgary Zoo, Canada offers a special week long module for a focused long-term study which students can carry out. Students choose a specific animal on which to focus for the week, and have at least one hour of observation time each day.

This gives them a chance to discover the relationships between their chosen animal, allows them to discover the “personality” of the animal, and to go beyond what visitors normally see. They get a chance to go “behind the scenes of the animal enclosure and gain a greater appreciation of the need for conservation. Thus the zoo school facilitates learning in a real world setting.

(<http://www.chevronopenminds.ca/zoo.html>)



Smooth Indian Otter

Virtual Zoo Guide Information

The website of the Monarto Zoo in Australia has a link where students can ask a question or search for information that they may need for a school project. There are facts sheets on a range of animals as well as topics related to the zoo, which can be downloaded and used by students.

(www.adelaidezoo.com.au/education/monarto-zoo)

College Students and Zoo Education

In South Australia, Adelaide Zoo and Monarto Zoo are used as educational resources to meet a number of needs of university students. These include:

- research scientists and their honours or Ph.D. graduate students undertaking major projects at the sites
- university graduate students undertaking major research projects on-site or off-site under the supervision of Zoos SA scientists
- undergraduate students undertaking work placement e.g. in Education, Animal management, Veterinary Science, Veterinary Nursing, Ecotourism & Marketing

- undergraduate students doing behavioural studies, surveys or other projects over an extended period of time (see multiple visits)
- undergraduate students on a one day visit who require extra input from Zoo staff (see supported one day visits)
- undergraduate students on a one day visit requiring no extra input from Zoo staff (see unsupported one day visits)



There is a clear set of requirements and guidelines and protocols to be followed in case of multiple visits as well as one-day visits. This includes prior bookings, permissions, discussion with zoo staff etc.

Multiple Visits

Undergraduate students undertaking Behavioural studies, surveys, or other projects over an extended period of time (many visits), with no additional staff input. These visits must be negotiated with Zoos SA EDUCATION STAFF at both sites.

- University staff make a booking through Zoo Education for their students to undertake such projects.
- Education staff will negotiate the scope of the program with curatorial and other Park staff and will provide a specific set of protocols which must be followed while the student is in the Zoo.
- A list of student names must be provided to Education on a record sheet for the gate keepers to use. The date range within which the students will undertake their projects should be clearly specified and should not extend beyond 10 weeks under normal circumstances.
- Students will be required to sign in and wear an appropriate badge whilst in the Zoo. At the end of the day they must return the badge and sign out.
- Students will be required to pay the student entry price on their first visit, but will be given free entry for the next 2 visits. If further visits are needed, students will pay the student entry price again on every third visit (i.e. 1st, 4th, 7th, 10th visits). Gate keepers will record each visit and all payments on the record sheet.
- University staff should alert students to explore the option of Membership of the RZSSA if multiple visits are anticipated.

- Students must follow all instructions provided by Zoos SA staff.
- Students must obey all signage, safety procedures and staff instructions in off-display areas.

Supported One Day Visits

Smaller Projects or One Day Excursions requiring Zoos SA staff input . These visits must be negotiated with Education staff.

University staff should contact Zoo Education to make a booking (at the reduced Education Price) and to outline the extra educational input the group requires on the day(s) of the visit.

Education staff will liaise with relevant staff (e.g. Curatorial, Animal Health, Marketing) to arrange a schedule of activities to accompany the excursion. The group will be charged at the same rate as school groups undertaking a program with an Education Officer. (See Education Prices for groups) to partially compensate for the time commitment of Zoos SA staff.

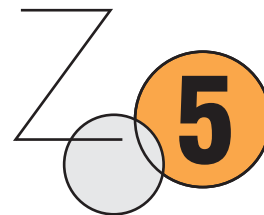
In planning this type of excursion, university staff

- must give sufficient time for the trip to be organized. A minimum of 4 weeks notice would be required
- must appreciate that Zoos SA staff are busy people. The day should be planned to make the most efficient use of staff time. E.g. Students with specific questions should be prepared to ask them at the time set to meet staff, and should not expect to follow up later with phone calls or emails to particular staff members
- should know that an expectation that many Zoos SA staff will be involved with a group of students is unreasonable
- should not expect extensive "behind the scenes" experiences
- should have a very clear idea of the educational objectives of their excursion and should communicate these ideas in writing to the Zoos SA staff who will be meeting with the students
- should be prepared to make the group payment, (not individuals paying separately) including student entry fee and the additional program fee, on the day of the excursion

(<http://www.adelaidezoo.com.au/education/monarto-zoo/teachers/tertiary-groups>)

Outreach

Spread, Visit, Encourage



When you can't go to the zoo, the zoo goes to you

While the zoo visitor is the primary audience of zoo education, there is still a large section of people to whom the zoo can reach out. This 'outreach' can reach sectors of the public who, for whatever reason, do not or cannot visit zoos.

Many zoos have addressed this potential and need and have regular programmes that take the zoo to the people, rather than bring the people to the zoo.

Several zoos have outreach programmes for schools. These serve the purpose of providing an offsite educational experience for school students. Different “package” are offered for different audiences and needs. In some cases they are curriculum-linked and include hand-outs and classroom materials. The goal of most such programmes is to stimulate curiosity about animals and their habitats and encourage respect for the natural world through close encounters with some animals and zoo programmes. Some zoos have programmes that are also offered to community groups, for special events like birthdays, etc. All these are charged programmes.

Zoos on Wheels

The Zoo Mobile Outreach Programme offered by the National Zoological Gardens of South Africa consists of a vehicle equipped with a variety of educational materials such as skulls, horns, skins, feathers, shells, posters and even some small live animals. These programmes are offered at schools, community gatherings, birthday parties and corporate functions.

The Zoo Mobile Programme offered by the Los Angeles Zoo and Botanical Gardens is offered to schools as well as community events. The Zoo Mobile staff use props, costumes and an interactive approach to provide facts as well as to increase awareness about wildlife, diversity and conservation. (www.lazoo.org/education/outreach/zoomobile)

The schools can choose a programme appropriate to the age-group of the students. For example animal adaptations for primary grade students.

The *DET Zoomobile Programme* offered by Taronga Zoo helps acquaint school children in the Sydney and New South Wales part of Australia with the native animals.

What the programme offers is clearly described.



Photo : www.auduboninstitute.org

Zoo, Park and Aquaria Guidelines and Education Experiences

Offsite Education Experiences

DET Zoomobile

ARAZPA Organisation: Taronga Zoo

Experience Synopsis: The DET Zoomobile is one of two Zoomobiles that operate out of Taronga Zoo as part of its outreach program. This Zoomobile provides an educational experience for school-aged students from both Sydney metropolitan and NSW regional areas. The aim of the program is to inspire and educate students about native animals through an entertaining and hands-on experience that encourages action in the conservation of our country's biodiversity.

Animals that are available on this program include:

- Gang Gang Cockatoo
- Tawny Frogmouth
- Galah
- Diamond Python
- Carpet Python
- Shingleback Lizard
- Blue Tongue Lizard
- Bearded Dragon
- Ringtail Possum
- Short-beaked Echidna
- Long Nosed Bandicoot
- Grey-headed Flying Fox
- Saltwater Crocodile
- Phasmid (Spiny Leaf Insect)
- Green Tree Frog

Audience: School-aged students.

Duration: 45 minutes to one hour.

Cost per participant: AUD\$3.30 per participant.



Set Up Costs: Van is currently leased at approx. \$1,000 per month. All other costs (including graphics, animal transport equipment, van fit out) approx. \$5,000.

How the experience is marketed: Brochure, mail out to schools, media coverage, website and word of mouth.

Staffing requirements: Full-time Educator.

Links and Partners: NSW Department of Education and Training other agencies including Botanic Gardens, Australian Museum, State Forests, Local Councils and Environmental Education Centres.

Resources to successfully run the class: Zoomobile Education Resource Kit which includes pre and post visit activities and curriculum links.

How class is evaluated: Teacher surveys.

Contact: Taronga Zoo Education Ph. +61 2 9978 4739.

Email: dsmith@zoo.nsw.gov.au

It is important to have a clear set of guidelines and conditions for the programme to facilitate an effective and appropriate interaction, especially when live animals are a part of the programme. *The Outreach Zoomobile Programme* of the Maryland Zoo in Baltimore lists clearly the guidelines for Zoomobile visit.

Guidelines for Zoomobile Visit

Site Information:

- Animals cannot be used in temperatures below 65° F and above 85° F.
- The ZooMobile must be provided with a parking space near the presentation area or entrance to the facility.

- Due to strict quarantine policies, please ensure that no other animals are present in the room.
- According to Maryland State Law, food is not permitted to be served or eaten in the same area as animal presentations.
- Audience members are strongly urged to wash their hands before and after a program. If any touching takes place during a program, hand washing after the program is required.
- The facility should provide chaperones in accordance with their organization's policy. The minimum chaperone to student ratio is 1 adult per 20 children.
- Zoo mobile programs must take place indoors. The presentation area must have doors and windows that can be closed.
- The presentation area must be large enough to maintain a 4-foot “buffer zone” between the presenters and the audience. Typically, a 40-foot square area (in addition to space for the audience) is sufficient.
- We reserve the right to cancel any program due to customer violation of these policies.



Program Information:

- All programs require a 6-foot long and 3-foot high table.
- The Great Animal Puppet Pageant and Night Shift programs require an electrical outlet in the program performance area.
- The Great Animal Puppet Pageant and Living Places, Living Planet programs require a minimum ceiling height of 8 feet
- Critter Costumes requires 7 chairs for student/participant use.
- The Great Animal Puppet Pageant program requires 2 adult sized chairs for the Outreach Instructors.

Cancellation and Fee Information:

- Payment is required two weeks prior to the program date. If payment is not received the program may be cancelled.
- Cancellations received fewer than 10 business days prior to program date will receive no refund.
- In the event that The Zoo cancels a program, an available alternative date or full refund will be issued.
- If the program is cancelled due to a customer violation of the ZOOMobile policy, the customer will not receive a refund.
- Changes of date received fewer than 10 business days prior to the program date are subject to a \$30 change of date fee.

To learn more or to make a ZOOMobile reservation, please call 443-552-5300 and speak with the Outreach Reservationists for further information. The reservationists is available on Monday, Wednesday and Friday from 1:30 pm - 4:30 pm.

ZOO mobile Fees

30-minute program: \$110.00 (pre K, K and Special Needs audiences only)

50-minute program: \$175.00

(2) 30-minute presentations, same day same site - \$200 (pre K, K and Special Needs audiences only)

(2) 50-minute presentations, same day same site - \$315

Travel fees apply outside Baltimore City

(www.marylandzoo.org/edzoocation/outreach-zoomobile.aspx)

Catering to Special Needs

The Los Angeles Zoo offers a specially designed programme for schools for children with disabilities or special needs, hospitals, day care centres (adult and children) and nursing homes.



The programme is about 30 minutes long and is tailored to the abilities of the audience, while encouraging participation. The volunteers give them a chance to interact with some small animals, touching these where possible, and explain unique aspects of the animals' needs, behaviour, abilities, adaptation, etc.

These visits are not charged. (www.lazoo.org/education/outreach)

Spreading the Message Beyond the Zoo

The Madras Crocodile Bank Trust (MCBT), Chennai has an ongoing environmental education programme for the villages and schools in the neighbouring area. This includes nature camps, training workshops for teachers and youth from fishing villages. They also take a mobile exhibition and run awareness programmes for schools and fishing villages in the area. (www.madrascrocodilebank.org)

The Central Park Zoo in New York has a theatre group that can be invited for putting up performances in schools. Through music, drama, puppetry and audience participation the Wildlife Theatre Players share information about wildlife, issues and conservation. These are programmes to suit the different age groups primary, and high schools. (<http://nyzoosandaquarium.com/czeducation>)

Snakes and Sundarvan

Mobile Snake Show was one of the programmes of Sundarvan, a Nature Discovery Centre, Ahmedabad, Gujarat.

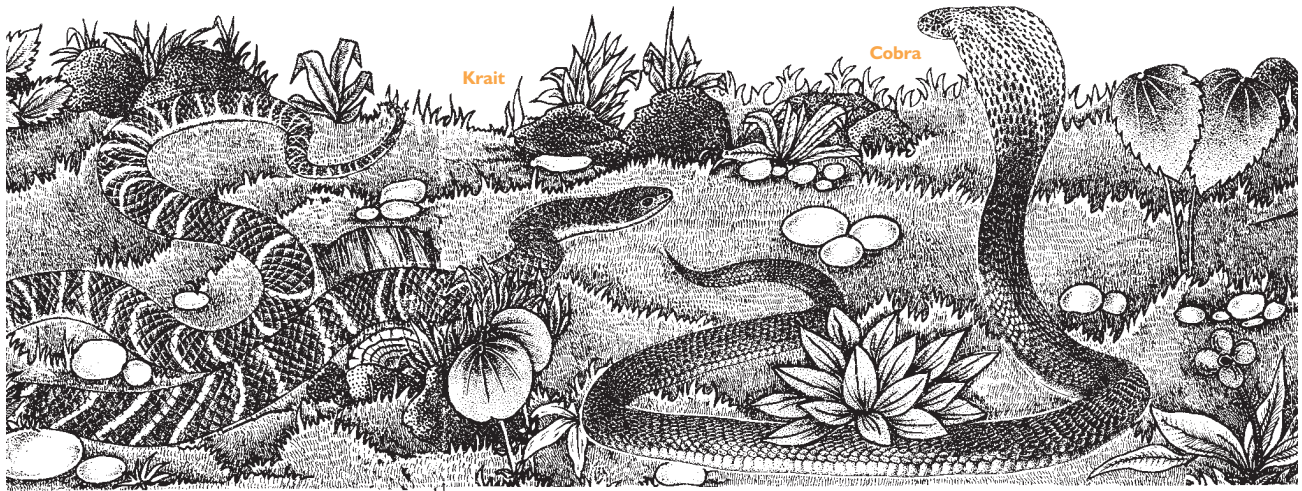


Photo: CEE

Sustaining Zoo Education Support, Sponsor, Conserve

Resources for Keeping it All Going

Human Resources

Zoo education is by its very nature interactive and most effective when live. However, not every zoo has adequate inhouse staff to take care of the numerous tasks involved in running a zoo. Add to this the need for providing the thousands of zoo visitors with an educative experience (by live interpretation, animal talks and demonstration, guided trails and activities), and zoos find themselves severely restricted by the lack of human resources.



Photo : CEE

Volunteers

Zoo around the world are addressing this need by offering volunteering opportunities. These range from programmes for school students (age 13-14 upwards), adult volunteers, docents and internships. In all cases, applications are invited (usually through the zoo website), and selected persons undergo an orientation/training programme. This varies from an one and half hour session to a series of sessions spread over 35-45 hours.

The volunteers have to give a commitment to give their services to the zoo. This varies from a one-year commitment, to a 6-month one with a minimum number of hours per week or month. There is a wide range of possibilities for involving volunteers, ranging from helping with visitor services, to food preparation for animals, to horticulture, to office assistance and fund raising.

Different zoo offer different placements depending upon their specific needs or requirements. Here is an example of a menu offered by Oregon Zoo.

Volunteer Opportunities

Adults

Many programs are available (dependent on openings) to Zoo Guides who complete a training series and make a volunteer commitment to the Oregon Zoo.

Enrichment Team: Create, research, and develop environment enrichment activities for all exhibit animals.

Information Booth: Staff the information booth. Assist visitors, lost parents, and tourists. Distribute information on our many zoo programs and about our wonderful city. Meet people from around the world.

Library Assistance: Help manage the zoo's volunteer library. Organize books and magazines. Help identify resources as requested.

Marketing Assistance: Work with the zoo's marketing staff to promote the zoo. Assist the media relations officer.

Photo Committee: Take photos and videos of zoo events and programs that are supported by volunteers.

Overnights/ZooSnooze/Camperoo: Implement after hours programming for youth groups and families on the zoo grounds. One of the innovative educational opportunities at the Zoo.



Program Animal Care: Help keepers care for animals used in education programs and Zoomobiles.

Pygmy Goat Barn: Share your enjoyment and knowledge of the pygmy goats. During the spring and autumn seasons answer questions of zoo visitors and care for the goats in the contact area.

Security: Help our security staff at events. Act as a visible deterrent to unacceptable behaviour. Help provide a safe and healthy environment for visitors and our animals. Extra training required.

Show Programs: A limited number of openings are available in the exciting PGE Discover Birds presentations. An additional training program gives you the opportunity to assist the trainers, care for the animals, and make presentations.

Speaker's Bureau: Tell the community about your zoo. Visit clubs, civic groups, community centers, and other organizations and talk about the zoo and show a slide or PowerPoint presentation.

Animal Management Assistant: Work with keepers cleaning and feeding exhibit animals. Special training, education, and experience required. You must volunteer for six months to one year before being placed.

Animal Talks: Present interpretive talks to visitors on the zoo grounds. Talk about penguin antics, elephant personalities, chimpanzee interactions, conservation issues and more.

Behind the Scenes: Take visitors behind the scenes in different exhibits for a close encounter with keepers and the animals they take care of.

Concerts: Help out with concert performances during the summer. Where else can you have animals, music, and community all at the same time?

Events: Plan, implement, and manage the many special activities on zoo grounds. Help with Packy's birthday party, new exhibit openings, Zoo Lights, and other events held all year long.

Horticulture: Work with gardeners or be a plant inventory specialist. Several opportunities exist to assist the zoo's gardening crew.

Staff Assistance: A call for help often comes from zoo offices. Assist with many tasks in the administrative offices.

Tours: Take groups on organized tours of the zoo as requested. Catered, youth, school groups, and new volunteers during training are some of the requested tours.

Train Wash: During the summer months the train needs special washing and cleaning. A fun way to spend a lazy summer morning and help your zoo.

V.A.S.T. (Visitor and Animal Studies Team): Animal behaviour research studies are conducted for the zoo's Living Collections Division and visitor studies conducted for other divisions. Special training is required.

Zoo Doers: Be a reporter, layout artist, or cartoonist for the volunteer monthly newsletter.

Zoo Experiences: Develop the content and conduct these animal related classes for children and their parents. We currently have 30 different offerings and we are adding more all the time.

Zoomobiles: Take small animals on the road.

Nursing Home Zoomobile: Take live animals and a slide show to nursing homes and retirement facilities. (Fridays, Saturdays)

Headstart Zoomobile: Take live animals to visit Headstart centers. Capture good attitudes early in a child's development.

Zoo Puppeteers: A new show for Zoo Lights is planned each year. Stories are animal related and designed for volunteer and audience enjoyment.

Youth

Zoo Teens: Young adults age 13-17 trained to do presentations with small mammals and reptiles for zoo visitors. Apply in January of the year you are interested in working.

Leadership Corps: A year around youth opportunity. Assist with keepers behind the scenes, help with the Trillium Creek Family Farm activities, and Jane Goodall Roots and Shoots projects. For youth who have worked in the summer program and wish to continue volunteering at the zoo.

(www.oregonzoo.org/volunteer)



Most zoos offer separate programmes for adults. Most of these are round-the-year tasks and involvement. Zoos also have programmes for teenagers. Most of these are offered as summer placements so that students can spend time during their summer vacation. The students help the educators in carrying out tasks like caring for and feeding. Small animals, younger children's activities, animal talks for young children, and special events like Earth Day or Discovery Day.

All such volunteers have to undergo a training programme (the duration differs from zoo to zoo) and give a specific commitment of time in volunteer hours (ranging from one half day a week to five hours a month). In almost all cases the volunteer programmes are announced on the zoo website and interested persons need to register in advance.

Toronto Zoo, Canada has a Summer Information Volunteers Programme. This is open to young people over 23 years of age. They have to take a three-day training session and commit a variety of roles including providing information to zoo guests at the front gate, challenging visitor's curiosity at interpretive stations throughout the zoo, and interacting with young visitors at the Kids Zoo. (www.torontozoo.ca/volunteers.asp)

San Diego has a Zoo Corps programme. "Kids Teaching Kids" is the motto for Zoo Corps, a program that gives teens opportunities to share fun animal facts and stories with San Diego Zoo visitors. The Zoo Corps team sets up discovery centers in the Children's Zoo and other locations around the Zoo, offering interesting and educational activities and crafts for Zoo guests of all ages. They are trained to educate the public about conservation issues, plants, animals, habitats, and general Zoo information. Zoo Corps members also help at special functions such as sleepovers, fund-raisers, and much more.



Zoo Corps is for students aged 13 to 16 who have an interest in conservation, education, or public speaking. They participate at least one day per month, after their training, and each session runs five or six months. A uniform is provided. A limited number of applicants are selected each session.

Young people between the ages 13 to 16 are eligible to apply for Zoo Corps but must attend one of the information sessions with a parent or guardian in order to receive an application.

(www.sandiegozoo.org/calendar/zoo_zoo_corps.html)

While generally 'volunteer' positions are not paid assignments, most zoos offer special benefits to these members. These include free admission, zoo membership, discounts in zoo restaurants and gifts, and membership to zoo newsletter.

Docents: The word 'docent' comes from the Latin 'docere' means to teach. It refers to individuals who are trained to provide educational services to people who visit facilities like zoos and museums. Many zoos have volunteers as well as docents. Often people start as volunteers, and after some experience move on to become docents.

Docents carry out a variety of educational and interpretation activities. For example, they lead guided zoo tours, they present animal programmes both within the zoo and as part of outreach to schools and other institutions, they interpret about wildlife and ecosystems through use of biofacts and educational animals.

These tasks require a good knowledge of scientific facts and a sound understanding of natural history, ecology and conservation. Thus zoos have a special training programme for docents which include all this, as well as developing skills of communication. In several zoos, docents have to undergo a certification process (exam and practical) before they can start their work.



Interview with a Docent

What is your job at the Brandywine Zoo?

I give educational tours to classes that come to the Brandywine Zoo. I also go to elementary schools and teach children about animals with the travelling zoo.

How long have you been working here?

I have been working here for 12 years.

How did you get your job?

I saw an article in the newspaper about volunteers needed at the Brandywine Zoo, so I came here. I went through some training and then started working

What do you like best about your job?

I like the animals, and I like to talk to people about the animals.

What is the hardest thing you've had to do on your job? The hardest thing I've had to do on my job is catching the chinchilla one time after it escaped.

What is your favourite animal?

My favourite animal is the otter.

(www.brandywinezoo.org/docent)

Internships: Some zoos offer intern programmes for college students which gives them practical hand-on experience of helping the professional zoo staff in different kinds of work. Cincinnati Zoo offers such opportunities in areas ranging from Information Technology to Veterinary Technology.

Intern Program

If you have a genuine interest in working at a zoological park or botanical garden, this internship may be right for you!

Cincinnati Zoo internships provide college students and recent graduates with practical hands-on experience assisting the Zoo's personnel with the daily operations of the park. Participating in the Intern Program at one of the world's premier zoos and nationally recognized botanical gardens will provide fascinating experiences and develop your career goals by employing your skills, motivations, and interests in a professional zoological environment. This exciting and challenging atmosphere offers you the opportunity to supplement and apply your classroom knowledge.

Typically, the Zoo's internships are 10 week, unpaid assignments. Fall, winter and summer internships are available. Exact starting dates vary for each session. A 2-3 day orientation is provided prior to beginning in the assigned work area.

Interns have the opportunity for housing across the street from the Zoo. Housing is available for a nominal fee of \$100. Space is limited and provided on a first-come, first-serve basis.

(www.cincinnati-zoo.org/Education/Intern%20Program/internprogram.html)

Financial Resources

Supporting Animal Upkeep: Adopt an Animal

Several zoos have this scheme under which individuals can choose an animal from the zoo and contribute an amount of money towards its feeding and upkeep. The contribution can be monthly or annual.

Different zoos have different levels for the contribution starting with a minimum and going upwards. For example Edinburgh Zoo has bronze, silver, gold and platinum levels, with each one having a contribution range and accruing benefits.

Adoption Levels

Bronze £40 to £74

- certificate suitable for framing
- fact sheet on your adopted species
- opportunities to come along to adopter events
- LifeLinks colour magazine three times throughout the year
- colourful stickers
- adopter's badge

Silver £75 to £149

- as Bronze, plus
- name listed at enclosure
- car window sticker

Gold £150 to £499

- as Silver, plus
- name listed in the Annual Review
- one year's RZSS Membership for one named person

Platinum £500+

- as Gold, plus
- one year's RZSS Membership for another named person
- invitation to Platinum Adopter Event
(www.edinburghzoo.org.uk/PageAccess.aspx?id=75)



The parent of the adopted animal enjoys certain adoption benefits. Zoos offer things like a colour photo of the adopted animal, an adoption certificate, certain number of free visits to the zoo, fact sheets on the adopted animal, invitation to adopt an animal parent day which includes talk with the animal keeper, behind the scenes visits etc.

Sponsorships and Support

In addition to educational programmes, zoos need support for upkeep of animals and enclosures, conservation efforts, science and recreation missions. Corporate sponsorship and support are important in these areas.

Corporates are offered a range of activities and programmes which they can choose to support. These may range from a specific animal or exhibit to funding research or conservation projects.

Zoo Victoria in Australia invites corporate donations to support its existing learning programmes or fund the development of new ones. One existing programme is Planet Keeper which is an innovative learning programme for students aimed at raising awareness of conservation issues, gaining deeper understanding and taking action to reduce the negative impact of human actions on the environment.

(www.zoo.org.au/fotz)

Many zoos have a Friends of the Zoo initiative through which individuals or corporates can help support zoo activities. Singapore Zoo offers Friends of the Zoo membership to families as well as individuals. The members enjoy privileges such as free entry to the zoo, free parking at the zoo, discounts on admission fees for guests, discounts at food and sales outlets, as well as free issues of the zoos quarterly newsletters.

There is also a special School Friends of the Zoo membership scheme through which the entire school becomes a member and gets similar privileges of free admission, free participation in environment programmes and video shows, free worksheets for visiting students.

Partnership with zoos offers corporates an opportunity to capitalize on the zoos' universal appeal and reach a very large and diverse audience.



An example of sponsorship options offered by San Antonio Zoo:

Event Sponsorship

The San Antonio Zoo, USA offers sponsorship opportunities for a variety of exciting special events held throughout the year. The Zoo's special events sponsorship packages are designed to support a variety of corporate marketing and promotional strategies and can be customized to meet specific marketing objectives. Special event sponsorship packages are designed to offer corporate partners:

- Visibility, impact, and access to a family oriented target in the San Antonio and surrounding area markets.
- Opportunities to participate in customized promotions including those specifically designed to drive customer traffic.
- Opportunities to build corporate image and awareness of products/services through corporate displays, sampling, and distribution of promotional material.
- Guaranteed media in event based advertising and promotional packages, onsite signage, banners, and event programs.
- An association with one of the community's treasured cultural resources and an opportunity to be an integral part of the Zoo's continued growth.
- Exclusive opportunities for entertaining and cultivating important customers and employees.

Feast with the Beast April

Title Sponsorship \$ 15,000

Other Levels \$ 1,000, \$ 5,000, \$ 10,000

Feast with the Beast is a beastly feast where visitors enjoy an evening at the Zoo while sampling some of San Antonio's finest cuisine and cocktails. Local restauranteurs and other vendors line the Zoo's pathways handing out samples to guest as they stroll through the Zoo on a beautiful spring evening. Feast with the Beast includes a silent auction as well as games, prizes, music, animal close-ups, and safari walks. The projected attendance for this event is around 2,000 guests.

Zoo Animal Run/Kid's Animal Zoo Run September

Title Sponsorship \$ 15,000

Other Levels \$ 1,000, \$ 5,000, \$ 10,000

In the Zoo Animal Run, teams of four participate in a wild eight-mile relay through Brackenridge Park. The event is limited to 200 teams. Trophies go to the top three teams in each division. T-shirts will be given to all entrants.

In the Kid's Animal Zoo Run, children ages 11 years and younger run a ¼ to ½ mile lap through the Zoo. Trophies go to the top three kids in each division. T-shirts will be given to all entrants.

Zoo Boo October

Title Sponsorship \$ 20,000

Other Levels \$ 1,000, \$ 5,000, \$ 10,000, \$ 15,000

One of San Antonio's most popular family Halloween events, Zoo Boo provides spectacular fun for all ages. This frightful night includes trick-or-treating at sponsored doors, face painting, rub-on tattoos, ghoulish hairdos, entertainment, games, and a costume contest. The projected attendance for this two-night event is 10,000 visitors.

Zoobilation Ball November

Title Sponsorship \$ 100,000

Other Levels \$ 10,000, \$ 25,000, \$ 50,000, \$ 75,000

One of San Antonio's favourite black-tie gala's, Zoobilation Ball features both a live and a silent auction, and dinner and dancing. Yearly attendance for Zoobilation Ball is 900 of San Antonio's most influential people.

Education Sponsorship

The Zoo's educational programs are designed to support core-learning goals in science, conservation, math, arts, and social sciences while providing youth with an orientation to community service. Sponsorship packages are customized to recognize corporate support of these special underwriting opportunities.



International Migratory Bird Day (IMBD) Spring

Sponsorship Level \$ 5,000

International Migratory Bird Day (IMBD) Migration Sensation is an effort to increase awareness of neo-tropical migratory birds and the need for conservation of their habitat in South Texas. Migratory bats and butterflies will also be included in the celebration. IMBD is held just outside the Zoo's Butterflies! Caterpillar Flight School. The goal is to raise public awareness about migratory birds and their habitats. The projected attendance for this program is approximately 3,000 guests.

School Group Scholarship Funding School Year

Funding Levels Variable \$ 5,000 - \$ 50,000

The San Antonio Zoo is a field trip destination for more than 100,000 school children each year. Because of school district budget constraints this number has fallen from its previous high in the late 1990s of 150,000. San Antonio has some of the poorest school districts in the state and many of them cannot afford to bring their school children to the Zoo. A typical kindergarten class of 135 students needs to raise a minimum of \$810 to afford a trip to the Zoo, which includes busing charges. Therefore, the Zoo utilizes sponsorship money for scholarship opportunities for schools to continue their field trips to the Zoo.

Zoo Camp Adventures June August

Sponsorship Level \$ 15,000

Every summer, 350 children have the opportunity to spend a week at the Zoo learning about a wide variety of animals while creating awesome crafts and developing friendships. Each child receives a colourful T-shirt to wear throughout the week. The underlying theme for all children's programs is conservation and

appreciation of the natural world. Creative performances during the closing ceremony allow children to share with their proud parents the wonders of the wild.

Tiny Tot Nature Camps June August

Sponsorship Level \$ 15,000

Through a special series of presentations, children learn basic skills such as colours, shapes, and numbers while they explore the amazing world of animals. T-shirts, snacks, songs, stories, and fun for parent and child are all included.

Enchanted Evening Tours Throughout

Sponsorship Level \$ 10,000

Come see where the wild things are in the quiet of the evening. Zoo staff will take you on a personal after-hours tour to see how resident animals let down their hair after the day's crowds depart. We'll have the chance to hear the hyenas laughing, the hippos' thunderous calling and the big cats roaring. The Zoo takes on a whole new perspective in the evening.

Breakfast with the Animals Throughout

Sponsorship Level \$ 10,000

Ever wonder what goes on behind-the-scenes? Bring the whole family for a walk on the WILD side to discover what the animals eat, where they sleep and how the keepers care for them. You'll start with a scrumptious breakfast and then adventure behind-the-scenes.

Roars and Snores Throughout

Sponsorship Level \$ 10,000

Gather a group of friends or family and come spend the night at the Zoo. Meet the Education animals up close, tour the Zoo at night, watch a special presentation by the bird department, and have tons of fun.

Publication Sponsorships

The Zoo's publications, all professionally designed, serve as a guide to Zoo activities, events, and educational programs. These publications are widely distributed to various target audiences including member households, corporations, political leaders, and educators.

The following publications are available for sponsorship:

News from the Zoo (members' quarterly magazine)

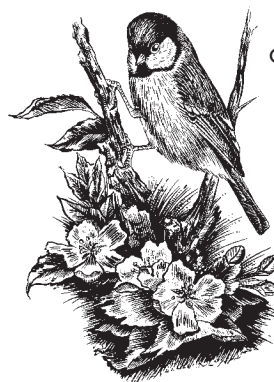
Wild Times (members, monthly newsletter)

EdZoocator (yearly education newsletter)

Annual Report

Sponsorship Levels Variable based on publication.

(www.sazoo-aq.org/support/sponsorops.html)



Grey Tits

Websites and Zoo Networks

Some International Zoo Websites

	Name	Place	Website
1	Auckland Zoo	New Zealand	www.aucklandzoo.co.nz
2	Adelaide Zoo	Australia	www.adelaidezoo.com.au
3	Antwerp Zoo	Europe	www.zooantwerpen.be
4	Artis Zoo	Netherlands	www.artis.nl
5	Australia Zoos	Australia	www.australiazoo.com.au
6	Berlin Zoo	UK	www.zoo-berlin.de/en.html
7	Birmingham Zoo	USA	www.birminghamzoo.com
8	Bowmanville Zoo	Canada	www.bowmanvillezoo.com
9	Bristol Zoo Gardens	UK	www.bristolzoo.org.uk
10	Bronx Zoo	USA	www.bronxzoo.com
11	Brookfield Zoo	USA	www.brookfieldzoo.org
12	Calgary Zoo, Botanical Garden & Prehistoric Park	Canada	www.calgaryzoo.org
13	Central Zoo	USA	www.centralparkzoo.com
14	Chester Zoo	UK	www.chesterzoo.org
15	Chevron Open Mind School Program	Canada	www.chevronopenminds.ca
16	Cincinnati Zoo & Botanical Garden	USA	www.cincyzoo.org
17	Cleveland Metro Park	USA	www.clemetzoo.com
18	Cologne Zoo	Europe	www.zoo-koeln.de
19	Columbus Zoo	USA	www.columbuszoo.org

20	Denver Zoo	USA	www.denverzoo.org
21	Disney's Animal Kingdom	USA	http://disneyworld.disney.go.com/wdw/parks/parkLanding?id=AKLandingPage
22	Dudley Zoo	UK	www.dudleyzoo.org.uk
23	Durrell Wildlife Conservation Trust	UK	www.durrellwildlife.org
24	Edinburgh Zoo	UK	www.edinburghzoo.org.uk
25	Gembira Loka Zoo	Indonesia	www.joglosemar.co.id/diparta_ygy/zoo.html
26	Gladys Porter Zoo	USA	www.gpz.org
27	Johannesburg Zoo	South Africa	www.jhbzoo.org.za
28	Jurong Bird Park	Singapore	www.birdpark.com.sg
29	Los Angeles zoo	USA	www.lazoo.org
30	Marwell Zoological Park	UK	www.marwell.org.uk
31	Melbourne Zoo	Australia	www.zoo.org.au/MelbourneZoo
32	Munster Zoo(Allwetter Zoo)	Europe	http://www.allwetterzoo.de
33	Nashville Zoo	USA	www.nashvillezoo.org
34	National Zoological Gardens of South Africa	South Africa	www.zoo.ac.za
35	Ocean Park	Hong Kong	www.oceanpark.com.hk
36	Paignton Zoo	UK	www.paigntonzoo.org.uk
37	Papanack Park Zoo	Canada	www.papanack.com
38	Perth Zoo	Australia	www.perthzoo.wa.gov.au
39	Rotterdam Zoo	Netherlands	www.rotterdamzoo.nl
40	Royal Botanic Gardens	UK	www.kew.org

41	Sandiego Zoo	USA	www.sandiegozoo.org
42	Santa Barbara Zoo	USA	www.santabarbarazoo.org , www.sbzoo.org
43	Singapore Science Centre	Singapore	www.science.edu.sg/ssc/index.jsp
44	Singapore Night Safari	Singapore	www.nightsafari.com.sg
45	Singapore Zoo	Singapore	www.zoo.com.sg
46	Smithsonian National Zoological Park	USA	http://nationalzoo.si.edu
47	St. Louis Zoo	USA	www.stlzoo.org
48	Taipei Zoo	Taiwan	http://english.taipei.gov.tw/zoo
49	Taronga Zoo	Australia	www.zoo.nsw.gov.au
50	The Belize Zoo	Central America	www.belizezoo.org
51	The Biblical Zoo	USA	www.jerusalemzoo.org.il/en
52	The Maryland Zoo	USA	www.marylandzoo.org
53	The Phoenix Zoo	USA	www.phoenixzoo.org
54	Toledo Zoo	USA	www.toledozoo.org
55	Toronto Zoo	Canada	www.torontozoo.com
56	Twycross Zoo	UK	www.twycrosszoo.com
57	Victoria Zoo	Australia	www.zoo.org.au
58	Vienna Zoo	Europe	www.zoovienna.at/e/index.html
59	Wellington Zoo	New Zealand	www.wellingtonzoo.com
60	Wildfowl and Wetlands Trust	UK	www.wwt.org.uk
61	Wildlife Conservation Society	USA	www.wcs.org
62	Zoo Melaka	Malaysia	www.zoomelaka.gov.my
63	Zoological Society of London (ZSL)	UK	www.zsl.org/zsl-london-zoo
64	Zurich Zoo	Switzerland	www.zoo.ch

Some Zoo Networks

1	African Association of Zoological Gardens and Aquaria	PAAZAB	www.paazab.com
2	American Association of Zoo Veterinarians	AZA	www.aza.org
3	Australian Regional Association of Zoological Parks and Aquaria	ARAZPA	www.arazpa.org.au
4	Botanic Gardens Conservation International	BGCI	www.bgci.org.uk
5	British and Irish Association of Zoos and Aquariums	BIAZA	www.biaza.org.uk
6	Central Zoo Authority	CZA	www.cza.nic.in
7	Colombian Association of Zoos and Aquariums	ACOPAZOA	www.acopazoa.zoobaq.org
8	Conservation Breeding Specialist Group of the IUCN/SSC	CBSG	www.cbsg.org
9	Eurasian Regional Association of Zoos and Aquariums	EARAZA	www.zoo.ru
10	European Association of Zoos and Aquaria	EAZA	www.eaza.net
11	International Zoo Educators Association	IZE	www.ize.net
12	Japanese Association of Zoos and Aquariums	JAZA	www.jazga.or.jp
13	Malaysian Association of Zoological Parks and Aquaria	MAZPA	www.mazpa.org.my
14	South Asian Zoo Association for Regional Cooperation	SAZARC	www.zooreach.org
15	South East Asian Zoos Association	SEAZA	www.seaza.org
16	The World Conservation Union (formerly called International Union of Nature Conservation)	IUCN	www.iucn.org
17	Wildlife Information Network	WIN	www.wildlifeinformation.org
18	World Association of Zoos and Aquariums	WAZA	www.waza.org
19	WWF-The Global Conservation Organization	WWF	www.wwf.org
20	Zoo Outreach Organization	ZOO	www.zooreach.org

**Educate Entertain
Conserve Engage**

**Enrich
Enable Inspire**

**Inform
Excite Attract**

**Enthuse Support
Act Encourage**



ISBN : 978-81-89587-45-1

