

A HISTORY OF ZOOS

The purpose of zoological societies from their inception has been to inform and educate the public about animals. In recent years, they have also begun to take a more active role in wildlife conservation. In earlier times, zoos were not always committed to causes of education and conservation. The predecessor of the zoological garden is the menagerie, which has a long history from the ancient world to modern times. A “**menagerie**” is the first recorded method of displaying common and exotic animals in captivity and was mostly connected with an aristocratic or royal court and it was thus situated within a garden or park of a palace. The aristocrats intentions were not primarily of scientific and educational interest but they wanted to illustrate their power and wealth, because exotic animals, alive and active, were less common, more difficult to acquire, and more expensive to maintain. The first formal zoo was formed from the menagerie of Queen Hatshepsut of Egypt in the 15th century B.C. and was known to have hippos, hartebeest, elephants and wildcats.

Although many societies practiced exotic animal keeping, it was the Europeans during the Middle Ages that popularized it. The most prominent animal collection in medieval England, The Tower Menagerie in London, began in 1235 under Henry III. It was known to have held lions and bears.

By the end of the fifteenth century, during the Renaissance period, the Italian aristocracy, wealthy patricians and clergymen, began to collect exotic animals at their residences on the outskirts of the cities. Their villa gardens were used for their collections. One of the largest collections was in Italy at the Villa Borghese in Rome, built 1608-1628.

During the 17th Century, Louis the XIV had a menagerie of "ferocious" beasts built at Vincennes for the organization of fights. He also had built the Palace of Versailles where he erected a menagerie within the palace's park. It was the first in the baroque style with a circular style of housing animals, with a pavilion at its center.



royal menagerie of Versailles during the reign of Louis XIV, 1643-1715

In the nineteenth century, these aristocratic menageries were displaced by the modern zoological gardens with their more scientific and educational approach. The Vienna Zoo, a former menagerie, is considered the oldest existing zoo, built in 1752 and open to the public in 1765. The first zoo founded with the purpose of scientific research and education, exhibiting animals to the public, was the Menagerie du Jardin des Plantes in Paris in 1795.

The first public zoo in the United States, the Central Park Zoo in New York City, was opened in 1860. Although in 1859, the Philadelphia Zoological Society had made an effort to establish a zoo, they delayed opening until 1874 due to the American Civil War. The majority of American zoos however were established in the early part of the 20th century. These zoo's animal exhibits were haphazard, with bare barred cages and individual specimens of each species. The move towards the modern zoo began with Carl Hagenbeck, the father of the modern zoo, even though most of his concepts were developed in 1907. He established a zoo outside of

Hamburg, Germany. His zoo design used open enclosures surrounded by moats, rather than barred cages, to better approximate animals' natural environments.

In 1931, Whipsnade Park in Bedfordshire, England became the first open style “wild animal park” with its large enclosures on 600 acres. Visitors experienced driving through these enclosures and came in close contact with the animals. 40 years later, The San Diego Wild Animal Park set the bar high with open savanna style exhibits and mixed species displays.

As bars began to disappear in the 50's and 60's, the popular way to exhibit many larger animals such as bears and big cats was in stone grottos with moats in between them and the public. This type of exhibit still remains in many zoos today, as evident at the San Francisco Zoo.

The 70's saw the push towards more naturalistic exhibits. In 1975, Seattle's Woodland Park Zoo developed the landscape immersion approach to exhibiting animals, using some of Carl Hagenbeck's concepts of design. The immersion exhibit concept is one of natural or recreated habitats where the visitor cannot detect barriers between the animals and themselves. This concept is now considered “best practice” by most zoos.

Since then, there has been a push towards the animal's wellness and enrichment programs. (See **Enrichment/Wellness Study Guide**). Many zoos developed new exhibits based on how they can enrich the animals' lives. The **activity based design** uses methods that create opportunities for animals to be active and visible in the exhibit space and simulates as best they can their natural environment. The animals are given additional choices, which increases the animals' control over their environment. The **affiliative design** attempts to increase animals' social behaviors and even to create opportunities for interaction with the public. A more recent approach to design is the **rotational concept** where different species have access to the exhibit at different times. This increases activity levels and interest in the exhibit by the animals, as they explore the different smells and exhibit space.

Most modern zoos are also attempting to get away from “hodge-podge” exhibits and have concentrated on geographic regions of taxa. It is very common to find an African region, followed by Asia, North America, and so forth in today's zoo. These are typically mixed species exhibits if they are able to co-habitat peacefully. A predator among its prey would not be a good exhibit for long.

Today zoos' roles include research, education, conservation (such as breeding endangered animals and sometimes reintroducing them into the wild) and recreation/entertainment.

The **Association of Zoos and Aquariums (AZA)** was founded in 1924 as an organization dedicated to the advancement of accredited zoos. For accreditation, the AZA inspects members' facilities every 5 years, holding them to rigorous standards of exhibitory, animal care, education, conservation, and research. The SF Zoo is one of over 220 accredited zoos and aquariums in the United States.

AZA Programs include SSPs and TAGs. **Species Survival Plans (SSPs)** are management programs for endangered species. There are currently 112 species in SSP programs. **Taxon Advisory Groups (TAGs)** are management programs for larger groups of animals such as marine mammals. Studbooks strictly monitor and recommend breeding strategies for animals in

zoos' collections. Carefully monitoring genetic representation of the animals in zoos will allow for future genetic diversity.

Today, zoos approach conservation by *in situ* and/or *ex situ* efforts. *In situ* programs take place in the habitat of the endangered animal or plant. It involves recovering and protecting the native habitat, population and genetic management, education and participation of local peoples, and poaching or hunting protection. *Ex situ* programs are operated in zoos or research centers. This may involve breeding of captive populations for reintroduction, genetic research, or disease study. Typically, both types are going on in good programs, as habitat still needs to be available to release species back to truly succeed. *Ex situ* programs alone are typically last resort efforts to keep the gene pool preserved for the future. The San Francisco Zoo as been involved in each program.

History of the San Francisco Zoo

The San Francisco Zoo is accredited by the Association of Zoos and Aquariums and represents a uniquely successful partnership between the City of San Francisco and the San Francisco Zoological Society. The Zoo has a total available acreage of 125 acres of which 85 acres are developed. **The mission of the San Francisco Zoo is to connect people with wildlife, inspire caring for nature and advance conservation action.**

For a detailed History of the San Francisco Zoo go to: <http://www.sfzoo.org/zoohistory> or read:

A History of the San Francisco Zoo San Francisco Zoo; 2004

San Francisco Zoo: Images of America Katherine Girlich, Arcadia Publ.; 2009

Herbert Fleishhacker, a banker and president of the park commission, dreamed of a zoo for the city of San Francisco. A grizzly bear named "Monarch" was the first animal in what would become the SF Zoo. Monarch was California's last captive grizzly, and he became an important symbol of the state's evolving relationship with vanishing wildlife. Monarch's affiliation with the San Francisco Zoo began in 1889 when San Francisco Examiner media magnate, William Randolph Hearst, engaged one of his reporters, Allen Kelly, in a heated debate over whether grizzlies still existed in California. Hearst ended the argument by challenging Kelly to go out and find one.

After nine months in the San Gabriel Mountains of Ventura County, Kelly and the Examiner party lured an enormous grizzly into a log catch pen baited with honey and mutton on Mt. Gleason. They named the bear Monarch, after the old San Francisco Examiner, the "Monarch of the Dailies." Monarch lived more than 20 years in captivity; first at Woodward Gardens, then in Golden Gate Park. He never made it to the Zoo's current location, but is credited for causing Fleishhacker to find the current location. Monarch became a figure of strength



and rejuvenation when he survived the great 1906 earthquake and fire in San Francisco.

After Monarch died in 1911, he was mounted and placed on exhibit at the DeYoung Museum's Natural History Museum. Monarch remained in storage at the DeYoung until the curator retired. The mounted bear was then given to the California Academy of Sciences. Sculptor Robert Schmidt made a clay model of Monarch for use in designs for the California emblem. In 1953 Monarch was sketched as the model for the state flag.

Fleishhacker talked about adding more exotic species such as lion, apes, and elephants as the bear's neighbors, but the park superintendent at the time balked at the idea. It was time to find a new home. By the mid-1920's he had settled on a location on the far southwestern corner of the city, next to the largest swimming pool in the country, which would be known as "Fleishhacker Pool". The Mother's Building, a playground, and the Dentzel carousel were already on this site. The San Francisco Zoo that we know today was established in 1929, and a large portion was built in the 1930's and 1940's as part of a depression era **Works Progress Administration (WPA)** project. On October 6th, 1940, the new exhibits were opened to the public. The Zoo was originally called The Herbert Fleishhacker Zoo, after its founder. The official name of the Zoo, The San Francisco Zoological Gardens, was adopted February 27, 1941, following the suggestion of Herbert Fleishhacker.

In October 1993, the San Francisco Zoological Society entered into a new partnership with the city of San Francisco and through a lease agreement, now manages the entire zoo. The city continues to partially fund the zoo and to participate in decision making on major projects and policies. The Zoo is governed under the Recreation and Park Commission and a Board of Directors governs the Society. A Joint Zoo Committee is made up of three members of the Recreation and Park Commission and three members of the Board, which oversees policy and provides a public forum.

Timeline of events:

- 1929 - zoo opens as the Fleishhacker Zoo
- 1941 - zoo renamed the San Francisco Zoological Gardens
- 1954 - San Francisco Zoological Society was established as a non-profit membership organization
- 1968 - Zoo Docent Council program was established (DEC)
- 1975 - Zoo hospital opens
- 1979 - Insect Zoo opens
- 1980 - Gorilla World opens
- 1980s - The Zoo participates in 14 of the newly established Species Survival Plans for endangered species including gorillas and black rhino
- 1984 - Zoo hosts a giant panda exhibit from China resulting in record breaking crowds
- 1985 - Primate Discovery Center & Koala Crossing open.
- 1993 - Zoo operations were transferred from the city to the Zoological Society
- 1997 - Avian Conservation Center opens and the Zoo becomes the first institution to exhibit aye-ayes
- 1993 - The Zoological Society took over management and operations of the Zoo in 1993 from the City of San Francisco in a unique public/private Lease Partnership Agreement.
- 1997 - San Francisco voters approve "Proposition C", a \$48 million bond measure to rejuvenate the Zoo

- 1998 - Little Puffer Steam train is brought back in service after restoration. Previously, it ran from 1925 to 1978.
- 2001 - three major bond "C" projects completed; the Lurie Education Center, The Koret Animal Resource Center, and the expanded Children's Zoo and Family Farm
- 2002 - new entry village opened, switching from Sloat to the ocean side of the Zoo. Lemur Forest also opened this year and the Dentzel Carousel was renovated
- 2004 - African Savanna, an expansive mixed species exhibit, opens
- 2007 - Grizzly Gulch opens by private funding
- 2013 – Elinor Friend Playground opens and encourages curiosity about conservation and animal connections among young explorers of all abilities and ages

SERVICES AND FACILITIES OPERATED BY THE SAN FRANCISCO ZOOLOGICAL SOCIETY WHICH ARE RELEVANT TO DOCENT ACTIVITIES

THE CHILDREN'S ZOO

The purpose of the Children's Zoo is to educate and entertain through close contact and viewing of a variety of domestic and wild animals. The original Children's Zoo, a semi-mobile unit, opened in 1964. It was leased and then purchased by the Zoological Society. Between 1966 and 1968, the Society initiated Phase I of converting the original temporary mobile installation into a permanent facility via construction of the main barn and the nursery with its supporting service facilities. In 1971, the City and Society shared construction costs for Phase II, which rounded out the current Children's Zoo and animal contact area.

The Family Farm opened in June of 2001 with a new bam where some of the larger domestic animals are housed. The old bam has also been renovated and there is a chick hatchery now in place of the nursery. This area of the Children's Zoo is to show Zoo visitors that domestic animals are every bit as interesting and even, in some cases, as endangered as the exotic species in the main zoo.

The Insect Zoo opened in the spring of 1979 and was the first Insect Zoo in California. It developed as an extension of the Zoological Society's successful Bug Club for members and their families. This special exhibit is made up of 30 display cases showing the five classes of arthropods: insects, arachnids, millipedes, centipedes and crustaceans. Exhibits are grouped by behavior: the plant eaters, the predators, and the scavengers. Popular exhibits include a beehive and a termite colony.

Nature Trail is a program utilizing ZooMobile animals and junior volunteers. At stations along a wooded trail in the Children's Zoo, the volunteers (12-16 years old) talk with the public about the animals. (Weekends from Easter to Halloween and summers every day except Monday).

THE ANIMAL RESOURCE CENTER

The new 6,000 square foot facility, the Koret Animal Resource Center, houses the animals used in our educational programs. Until June 2001, the ARC was in the old 2,000 square foot "Pony Bam" where horses that were used for the pony rides at the Zoo were kept, which had been was

renovated in 1974 to provide space for the fifty-plus animals that are used for Nature Trail and Zoomobile. The new facility will enable the ARC to increase the number of animals they can house and care for, and on the weekends is open to the public for a short period so that these "teaching" partners can be seen and enjoyed by everyone.

The 11,000 square foot building, which houses the Education Department, is, now part of the Children's Zoo. The Education Department used to be in a 1,600 square foot mobile building to the east of the animal exercise yard was paid for by a grant from the Cowell Foundation. That unit housed meeting and classroom space, and has since been demolished to make way for the new Zoo Street entrance which opened during the summer of 2002. Touring Docents check in and out there of the new building on their tour days.

ZooMobile was begun in March 1973 when a room in the Children's Zoo Nursery was converted into living quarters for small animals prepared to "go to school". In those days, ZooMobile was free and serviced nursery schools, hospitals, and facilities for the disabled. In September of the same year, CocaCola donated a used station wagon to the program and in October ZooMobile began to visit the third grade classes of the San Francisco Unified School District. In 1975, ZooMobile received a donation from the McCarthy Foundation for renovating the old Pony Barn for use as a facility for the animals. In 1978, ZooMobile became part of the 3rd and 5th grade science curriculum of the SFUSD. The funding for that program, involving 240 classrooms, was provided by a federal ESEA Title IV-C grant. A grant from the San Francisco Foundation in 1979 made possible the distribution of written materials to accompany and enrich the school child's ZooMobile experience. Today, ZooMobile travels to schools, libraries, convalescent centers and hospitals all over the Bay Area. ZooMobile regularly receives funding from the San Francisco Education Fund to take ZooMobile to schools for multiple visits. Fees are charged based upon the number of classes taught and the distance the van must travel.

The AVIAN CONSERVATION PROGRAM

In operation since 1978, ACP is a program committed to the captive breeding of endangered and threatened California birds of prey. The offspring produced are then released into appropriate habitats throughout California in order to bolster dwindling wild populations. ACP became active in the Pacific Bald Eagle Recovery Plan in 1986, and produced California's first bald eagle hatched in a breeding-for-release program in 1991. The eaglet was eventually released into the wild on Santa Catalina Island. Research on breeding behavior, diet and nutrition, incubation, development of young, etc. is conducted at the Zoo site. This information is shared with other captive breeding programs in addition to being used by ACP staff to improve breeding and rearing success. Through the Zoo's Bald Eagle Recovery Project, 36 bald eagle chicks have been hatched, reared and released into the wild since 1991. While celebrating the proposed de-listing of the bald eagle from the Endangered Species List, the SF Zoo continues its work to reestablish bald eagle populations in California.

In March 1997, the new Avian Conservation Center was opened with all new breeding facilities for up to 8 pairs of breeding eagles as well as holding and other areas for birds. Eventually, the plan is to raise California Condors and an area is available to build those facilities when applicable.

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WHAT SHOULD ZOOS TEACH?

In years gone by, the question of what to teach in zoos seemed a simple one. Almost all programs concentrated upon taxonomic themes, arranging hoofed animals here and big cats there, primates one place and waterfowl someplace else. Basically, zoos tried to help their visitors learn what kinds of animals there are by compartmentalization. It was important to show as many different kinds of animals as possible. Although this approach is still present, today's audiences are newly sophisticated in wildlife matters. They have been flooded with handsome natural history books, wildlife television programs and movies. It no longer makes sense for zoos to accord their highest priorities to simply showing what kinds of animal there are, even though non-living aids cannot duplicate the living creature itself. Today, zoos must show more of what animals do and do not do, where they live and how they live and better provide opportunities for the involvement of personal observation. While schools must compartmentalize to teach, zoos should attempt to synthesize, bringing together scattered ideas of anatomy and chemistry, geography and physiology, environmental dependencies and interrelationships, all helping to philosophy and a concept of the living, breathing creature and its natural community. Because the vast majority of zoo animals are representatives of declining species, the highest priorities in zoo education should clearly be given over to wildlife conservation and its importance to man.

Clarity about zoo teaching, as well as museum teaching, to which it is related, is by no means universal. Dr. Albert Pan, former director of the American Museum of Natural History, puts it well:

" ... it is very questionable whether the diffusion of factual knowledge actually is the principal ~ function of a museum in a metropolitan setting. Our primary function today may well be simply) to stimulate the imagination, sharpen the acuteness of observation and enrich the thinking of our visitors ... "

The same factors are even more evident in zoos, yet, zoo men have no doubt that visitors learn facts in zoos, whether they do in museums or not. No one knows how much or how well they learn, but there appears to be at least as much concern about these same questions in schools.

"In any event, zoo education ought not to be that of the classroom. Its unique characteristic is life itself. Before our eyes, animals walk and run, sleep and eat, give birth, mate, fight and die -like people. What zoos ought to be trying to better convey is a sense of involvement to their visitors; a feeling of man's oneness with animal life. In comparison with rural populations, city dwellers are steadily increasing. New generations of human beings are growing up without any natural contact with living wild creatures and the opinions of these overwhelming city populations will inevitably shape the future of wild lands and wild animals. The city zoo is located perfectly to affect these cityborn opinions, to inject some reality into their otherwise vicarious underpinning. Therefore, the zoo must better consider the needs of the citizen for continuing adult education - which means sound environmental information; the kind of information that will enable him to respond intelligently to changing threats to his environment and to that of his children."

William G. Conway
New York Zoological Society
An excerpt from *Zoo Education: Recent Interpretations*

CONSERVATION: OUR MOST IMPORTANT MESSAGE

During the course of your training class and throughout your career as a docent, you will learn thousands of facts and answers to questions our visitors have, such as "Why are elephants so large?" and "Why do flamingos stand on one leg?" and "Why doesn't that elephant have a tail?" It is satisfying to be able to relate specialized knowledge to another person. That is part of the reward of being a docent.

But of all the information we impart to the public, none is more important than conservation related issues. In today's world of rapidly diminishing natural habitats with accompanying species loss at an unparalleled rate, as well as ever-increasing human populations (people born today will live to see our current population of over five billion more than double), conservation is not only the main "theme" of modern zoos, it is really the only justification for zoos in the first place.

As depressing as habitat destruction and accelerated species destruction are, however, the news is not all gloom and doom. Today, individuals, special-interest groups and countries as a whole are making efforts to at least slow, and in some cases even reverse, this flow of irreplaceable loss. Even the most casual visitor can become an ally when given the right information at the right time. A substantial portion of the training course emphasizes the need for, and specifics of, conservation education. Here, by means of introduction, are some of the major conservation programs to which our zoo is strongly committed:

SPECIES SURVIVAL PLAN

The Species Survival Plan (SSP) is a cooperative effort among zoos and aquariums which works to maintain and increase the population of species which are highly endangered. Currently, there are over fifty animals on the SSP list. In some cases, it has been possible to actually release certain species back into their natural habitat including black-footed ferrets, red wolves, black and white ruffed lemurs, golden lion tamarins and Arabian oryxes. SSP animals at the San Francisco Zoo include black rhinos, snow leopards, gorillas, tigers, chimps, one-horned rhinos; and lion-tailed macaques. The Zoo's success in producing snow leopards, black rhinos and gorillas has helped to increase the chances for survival for these species.

AVIAN CONSERVATION PROGRAM

Most of the work done by the keepers and volunteers in the Avian Conservation Program is necessarily off-exhibit and the animals are not available for viewing by the public. But this in no way diminishes the important work and success that this conservation group has accomplished. Peregrine falcons, Harris hawks, bald eagles and golden eagles, among others, have been successfully bred and their offspring released into their natural habitats. Innovative breeding and incubating procedures have been developed by Avian Conservation personnel, procedures successful enough to win prestigious grants from several foundations and to be adopted by similar facilities elsewhere. Some of this pioneering research and data collection is the first successfully attempted anywhere.

MADAGASCAR FAUNA GROUP (MFG)

Madagascar, an island in the Indian Ocean 500 miles east of Africa, is roughly the size of California. It has been separated from the rest of the world for millions of years, mirroring Australia's seclusion. As a result, some 150,000 of its 200,000 species of plants and animals so far described are endemic to that country, occurring nowhere else on earth. Human populations in the last thirty years have doubled, and habitat destruction in the form of slash and burn

cultivation has devastated an alarming amount of tropical rain forest, and with it, animal species that live in that habitat. In fact, fourteen species of lemurs that lived only on Madagascar have been eradicated since humans arrived there. The Madagascar Fauna Group, of which Zoo Director David Anderson is chairman, is an effort by zoos and other institutions to help imperiled wildlife on the island. Programs are being developed in the United States, Great Britain and other parts of Europe to house endangered lemurs. Zoo professionals, working for the MEQ, are in Madagascar helping direct work in established reserves. And, most importantly, efforts are showing success in educating the people of Madagascar about the benefits of saving their own unique heritage. The most recent program involved the release of five captive-bred black and white ruffed lemurs back to the wild in 1998. After a year, all five have adapted, and are doing well in their new environment.

ANIMAL RESOURCE CENTER (ARC)

The Zoological Society's Koret Animal Resource Center (ARC) plays a major role in the Zoo's conservation education work. This new (opened in June 2001) facility is 6,000 square feet of state of the art accommodations for the Zoo's "teaching partners." Over forty-three species of birds, mammals, reptiles, and amphibians, mostly of small, transportable size are housed there. They are well cared for by full-time employees and a host of volunteers and are used in a variety of education efforts. On summer days, young volunteers use these animal ambassadors on the Nature Trail in the Children's Zoo to educate the public about their charges. Some of the topics covered are diet, habitat, conservation concerns, and the ill-advisability of taking animals from the wild or otherwise keeping exotic, wild animals for pets. ARC animals are also used for Wildlife Theater presentations, offered on Zoo grounds during the summer months. The ZooMobile visits hundreds of school children each year. Volunteers use the ARC animals to teach a variety of lessons that educate the students about their role in wildlife conservation. Many of the ARC residents are unreleasable because of the physical disabilities that brought them here in the first place, but they serve their own species and others well through their participation in the Zoo's education programs.

TEACHER WORKSHOPS

The Education Department and the Docent Council of the San Francisco Zoological Society do an excellent job in their conservation education efforts. But physical and financial restrictions naturally limit the number of people who can be reached by the staff and docents. In recent years, much progress has been made in the area of spreading the conservation message by instructing teachers of all age groups, from both public and private schools, methods they can use to effectively educate their students about conservation topics. This teacher-training is offered in various forms, from providing visiting teachers with lesson plans on particular themes to helping them prepare their classes for more instructive and meaningful zoo visits, to formal teacher-training workshops in the Education Classroom. At a time when science education is eroding in many public schools due to financial concerns, these forms of teacher education are some of the most effective and innovative methods the Zoo can use to reach a large and diverse segment of the education community.

RECYCLING EFFORTS

After discussing conservation efforts such as the Species Survival Plan and the Madagascar Fauna Group, informing our visitors of our everyday, common-sense conservation commitment to recycling seems a bit mundane. But, in fact, it is one of the most important messages we can deliver, not only for recycling's own sake, but also to reinforce those actions that people can take everyday to save our limited resources and, therefore, preserve dwindling habitats. Here at the

Zoo, our visible efforts include using recycled paper products in our handouts and for our food service whenever possible, as well as using ground water for plant irrigation. Not so visible is the massive scale of the Zoo's in-house recycling program. In 2000, the Zoo recycled nearly 80,000 pounds of glass, aluminum and paper, all material that would otherwise have ended up as landfill. Trees that would otherwise have become paper, as well as the myriad of animals that depend on the habitat they offer, are still around as a result of that effort. As important as the trees that are spared and the reduced energy consumption of not having to make an aluminum can from scratch, is the message of empowerment that we can give the public - that they can make a difference, in their neighborhood, in their country and in their world by rethinking old habits.

The Zoo prides itself in being a conservation organization and we try to tell this message to school groups, organized groups and the Zoo visitors with information about how they can help conserve as well.

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Guidelines to Wildlife Conservation:

- Educate yourself and others on conservation issues and the value of wildlife.
- Buy eco-friendly products. Refer to your "Seafood Watch Chart" for sustainable seafood choices. Buy recyclable products.
- Create habitats in your backyard for wildlife.
- Reduce, reuse, recycle and replenish. Don't buy things you don't need. Conserve water and energy.
- Choose your pets wisely.
- Support conservation organizations.

San Francisco Zoological Gardens Conservation Highlights

AZA Programs - Zoo animal staff are active in conservation programs for endangered species within the Zoo community. The Zoo is presently participating in 27 Species Survival Plan Programs (SSPs), participates in 76 studbooks and currently facilitates 5 studbooks, participates in 45 Population Management Plans (PMPs), and has institutional representatives for 33 Taxon Advisory Groups (TAGs).

Field Conservation - The Zoo participated in or collaborated with 16 field conservation projects ranging from local to international efforts, to save wildlife and nature. Last year the Zoo contributed over \$70,000 dollars to these projects and efforts including to the International Union for Conservation of Nature (IUCN) and AZA conservation campaigns.

Research Project Support - The Zoo's animal departments and vet hospital are actively assisting researchers around the world by supplying tissue, blood and fecal samples; monitoring behavior and breeding cycles, participating in hormone and birth control studies, and facilitating other research requests submitted by zoo and academic researchers. In addition, the Zoo has an extensive DNA Bank that can be used for research in the future at the Zoo and for researchers around the world.

Vet Programs - The Zoo's veterinarians and technicians work closely with outside organizations to prepare zoo and wildlife agencies for potential zoonotic diseases and human health issues. For

example, the Zoo participated in planning the state's response to Avian Flu and participates in West Nile Virus monitoring. The hospital also actively trains interns and externs from veterinary programs around the world.

Energy and Natural Resource Conservation - Over a million pounds of animal waste is sent out for composting each year. The Zoo diverted an average of 75% of its total solid waste away from landfills every month: composting food scraps from the restaurants and organics from our horticulture department, recycling paper, plastic, cardboard, scrap metal and glass. The Zoo has an active Biodiesel program and conducted extensive energy audits to assist with conservation efforts.

Staff and Visitor Initiatives - The Zoo funds staff participating in numerous initiatives which support conservation, including Earthwatch expeditions, AAZK, and Seafood Watch. Zoo visitors, along with staff, hear from conservation scientists and leaders through our Wildlife Lecture series. Staff and visitors also have the opportunity to financially support the work of these scientists and others by contributing to the "What Can a Dollar Do" program and various donation kiosks on Zoo grounds supporting Diane Fossey, the Madagascar Fauna Group, and the Living with Lions campaign.

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For up to date Zoo conservation activities visit: <http://www.sfzoo.org/conservation-overview>

“Why We Love Zoos” by Diane Ackerman, Opinionator February 4, 2012



The Estate of Garry Winogrand, courtesy Fraenkel Gallery, San Francisco

WHEN the Warsaw Zoo was bombed during World War II, killing most of the animals, the zookeepers devised a dangerous plan: they decided to use the cages and enclosures to hide more than 300 Jews who were fleeing the Nazis. Their refuge became one of the most successful

hide-outs of the war.

After I wrote about this true story in “The Zookeeper’s Wife,” readers shared their outrage with me about the bombing of a zoo, which they regarded almost as a sacrilege. I heard similar outcries in 2003 after the Baghdad Zoo was bombed. We’re used to the killing of enemies, but we reserve a special circle of hell for people who set fire to zoos. It’s the ultimate massacre of the innocents. The animals are silent victims, supposedly beyond our ideas of good and evil.

More than 150 million people a year visit zoos and aquariums in the United States. Why do we flock to them? It’s not just a pleasant outing with family or friends, or to introduce children (whose lives are a cavalcade of animal images) to real animals, though those are still big reasons. I think people are also drawn to a special stripe of innocence they hope to find there.

Though not a natural world by any means, more like a collection of living dioramas, a zoo exists in its own time zone, somewhere between the seasonal sense of animals and our madly ticking watch time. The relatively quiet, parklike setting offers an oasis in the crowded, noisy, stressful, morally ambiguous world where humans tend to congregate. The random gibbering and roaring, cackling and hooting, yowling and grunting strike ancient chords in us, a feral harmony that intrigues and lulls.

Smells create a subtle olfactory landscape that stirs us: from the sweet drops that male elephants dribble from glands near their eyes in mating season to the scent signposts of lions, hyenas and other animals. Just as dancers have body memory, we have wilderness memory.

One recent online survey suggests that more than half of zoo visitors are family groups — but a big proportion, too, are adults with no children. Zoo researchers have found through eavesdropping studies (in which people at several zoos were observed as zoo animals while they were observing the zoo animals) that most visitors talked surprisingly little. Yet they appeared to the observers to feel closer knit as a result of the visit, judging by their body language, as if there were a special bond that crystallized only in the presence of animals.

Zoogoers mainly strolled and enjoyed “exterior gazing.” That sounds like stop-and-go mindfulness — focusing on the lives of other creatures to dispel the usual mind theaters that plague us. A 2009 study by animal scientists in Japan showed that zoo visitors leave with significantly lower blood pressure, and they report feeling less stressed.

That so many of us, hundreds of millions worldwide, visit zoos each year is also a comment on our times and the marginalization of wild animals from our lives. It’s mainly in films and TV documentaries that we see animals in their natural settings, but on the screen they’re dwarfed, flattened, interrupted by commercials, narrated over and not accompanied by the mixed scents of grass, dung and blood; the drone of flies and cicadas; the welling of sweat.

Let’s set aside for the moment the debate about whether zoos are essential arks and educators or cruel wardens of unhappy animals, because arguments on both sides are compelling. For better or worse, zoos are how most people come to know big or exotic animals. Few will ever see wild penguins sledding downhill to sea on their bellies, giant pandas holding bamboo lollipops in China or tree porcupines in the Canadian Rockies, balled up like giant pine cones. Meeting them at the zoo widens a visitor’s view of nature and personalizes it.

Many of the visitors studied by zoo researchers express a deep rapport with at least one animal

and concern for the rest of its species, as well as a better idea of how humans fit into the natural world. It's telling, I think, that they use personal pronouns when they refer to the animals. In one study, inner-city parents said they visited with their children partly to help promote family values and inspire a concern for animals.

Millions of adults talk un-self-consciously with the animals, maybe to be alone with their thoughts or because they can't find a companion for the trip. For some it may be a way to socialize, identify, empathize with other beings, without the strain of always interacting with people.

What a lonely species we are, searching for signals of life from other galaxies, adopting companion animals, visiting parks and zoos to commune with other beasts. In the process, we discover our shared identity. We flock to zoos for many reasons, not least to shed some of the burden of being human.