Zoos (National Geographic Encyclopedia Entry)

A zoo is a place where animals live in captivity and are put on display for people to view. The word "zoo" is short for "zoological park." Zoos contain wide varieties of animals that are native to all parts of the Earth.

Though people have kept wild animals for thousands of years, those collections have not always resembled modern zoos. The first zoos were created as private collections by the wealthy to show their power. These private collections were called menageries.

Wall carvings found in Egypt and Mesopotamia are evidence that rulers and aristocrats created menageries as early as 2500 BCE. They left records of expeditions to distant places to bring back exotic animals such as giraffes, elephants, bears, dolphins, and birds. There is evidence that ancient zoo owners hired animal handlers to make sure their animals thrived and reproduced.

Zoos also existed in later civilizations, including China, Greece, and Rome. The Aztec emperor Montezuma II, in what is today Mexico, maintained one of the earliest animal collections in the Western Hemisphere. It was destroyed by Hernan Cortes during the Spanish conquest in 1520.

Modern Zoos

The model of the modern, public zoo became popular in 18th century, during the Age of Enlightenment. The Age of Enlightenment was a period in European history when science, reason, and logic were promoted as ideals of society and government. The scientific focus of the Age of Enlightenment extended to zoology.

During this time, people started wanting to study animals for scientific reasons. Scientists wanted to research animal behavior and anatomy. To do this, scientists and zookeepers had to keep animals in places that were close to, or resembled, the animals' natural habitats.

The first modern zoo, built in 1793, opened in Paris, France. The menageries of French aristocrats, including the king and queen, were taken by leaders of the French Revolution and relocated to the Ménagerie du Jardin des Plantes. The facility is still a busy and popular zoo in downtown Paris.

Early zoos like the Menagerie du Jardin des Plantes were more like museums of living animals than natural habitats. Animals were kept in small display areas, with as many species as space would allow.

Today, zoos are meant to entertain and educate the public but have a strong emphasis on scientific research and species conservation. There is a trend toward giving animals more space and recreating natural habitats. Zoos are usually regulated and inspected by the government.

Types of Zoos

Urban and Suburban Zoos

Urban zoos, located in large cities, still resemble the smaller zoos that were popular 200 years ago. Often, these zoos sit in the middle of cities, making expansion difficult. There is little room for urban zoos to grow, and many of the zoo's buildings are historic landmarks that cannot be destroyed or redesigned.

In many urban zoos, animals are kept in relatively small enclosures. Some animal activists argue that keeping animals in urban settings is cruel because of cramped conditions, noise, and pollution.

Urban zoos are common in Europe, while many zoos in the United States developed as sprawling parks in suburbs outside cities. These open-range zoos give animals more territory to roam and provide more natural habitats. This popular technique of building realistic habitats is called landscape immersion.

The San Diego Zoo, in southern California, is the largest zoo in the United States. It is a suburban zoo that houses more than 4,000 animals (800 different species) in its 0.4 square kilometers (100 acres). Landscape immersion divides animals into their natural habitats, such as the tundra (with reindeer and polar bears) or bamboo forest (featuring pandas.) The San Diego Zoo also includes a wild animal park, which is even more expansive (almost 8 square kilometers or 2,000 acres.)

Safari Parks

Larger than urban and open-range zoos, safari parks are areas where tourists can drive their own cars to see non-native wildlife living in large, enclosed areas. These attractions allow the animals more space than the small enclosures of traditional zoos.

Fuji Safari Park, in Susono, Japan, offers a traditional zoo as well as a drive-through safari park. Visitors can take their own cars or one of the park's buses. Fuji Safari Park offers night tours, so visitors can see nocturnal animals, or animals that are active at night. At the park, visitors can also feed some animals, such as lions, from bus windows. Not all parks encourage or even allow visitors to feed animals.

Safari parks, especially in Europe, are often part of larger theme parks or resorts. They include golf courses and fairground attractions, such as games and rides.

Game Reserves

Game reserves are large swaths of land whose ecosystems and native species are protected. The protections allow animals to live and reproduce at natural rates. Animals are allowed to roam free.

In the 1800s, a trip to hunt "big game" (large animals such as elephants or lions) was called a safari. While some game reserves allow traditional hunting safaris today, others limit visitors to a "photo safari," where visitors can shoot photographs, not animals.

Animals in all game reserves are protected from illegal hunting, which is a threat to many endangered species. Legal hunts are regulated by the government. Hunters must purchase licenses and are strictly limited to the type and number of animals they can hunt. Poachers, or hunters without licenses, kill animals for valuable body parts. Elephants, for example, are killed by poachers for their ivory tusks.

There are game reserves in Asia, the Americas, and Australia. However, most game reserves are in Africa. Millions of visitors flock to sites across Africa to see the same animals that captivated audiences thousands of years ago. The biggest attractions are Africa's "Big Five" species—lions, leopards, rhinoceroses, elephants, and water buffalo. The Big Five are not Africa's largest species (although the elephant is): They are the most difficult to find and, when legal, to hunt.

Only recently has a single zoo, Gondwana Game Reserve in South Africa, offered all Big Five animals in one place. Gondwana sits on 10,000 hectares (24,710 acres) near the center of South Africa's southern coast. Like many large game reserves, Gondwana has diverse ecosystems that occur naturally and has no need for landscape immersion. In Gondwana, grasslands coexist with shrubland called fynbos. Visitors to Gondwana, like many game reserves, can stay in hotels right in the park.

Petting zoos

Petting zoos feature domesticated animals that are gentle enough for children to pet and feed. Sheep, goats, donkeys, and rabbits are common petting zoo animals.

These types of zoos are found at parks and inside of larger zoos. Sometimes mobile petting zoos travel with fairs or carnivals from city to city.

Conservation

The World Association of Zoos and Aquariums, the international organization for zoos, is concerned with the health of animals in zoos. The focus of environmental efforts takes the form of research, captive breeding of rare animals, and conservation.

Researchers at zoos can study animals up-close. They can observe behavior such as mating and nutrition choices. Biologists and veterinarians are also available to treat sick or injured animals.

Captive breeding of endangered species makes zoos valuable places for animal survival.

Animals such as the black soft-shelled turtle, native to India and Bangladesh, are extinct in the wild. But they survive in several zoos around the world, with their health looked after by biologists.

The goal of many captive breeding programs at zoos is the re-introduction of animals into the wild. The California condor, a very large bird native to the west coast of the United States, has been reintroduced to its native habitat after breeding in zoos and wildlife parks. There are several breeding pairs of California condors in the wild today.

Critics of captive breeding programs say that releasing a few animals into the wild does little to help the species population. Animals are extinct in the wild largely due to loss of habitat. The re-introduction of animals, especially large mammals that require vast territory for survival, does nothing to recover lost habitat. People continue to develop land for homes and businesses.

Zoos often have conservation projects in the native habitats of the animals they keep in captivity. For instance, the World Association of Zoos and Aquariums established a partnership with people in rural Papua New Guinea to save tree kangaroos. These rare species are threatened by loss of habitat and the growing population of Papua New Guinea: Villagers hunt the tree kangaroo for meat. A zoo program introduced a rabbit-farming program to address the nutritional needs of the villagers. Zoos also set up conservation sites where the hunting of tree kangaroos was outlawed.

While zoos have put more importance on conservation and humane animal treatment in recent decades, some critics say it is cruel to keep animals in captivity. Critics argue that living in captivity takes away wild animals' natural behavior and instincts. Supporters of zoos say they play an important role in protecting endangered species.