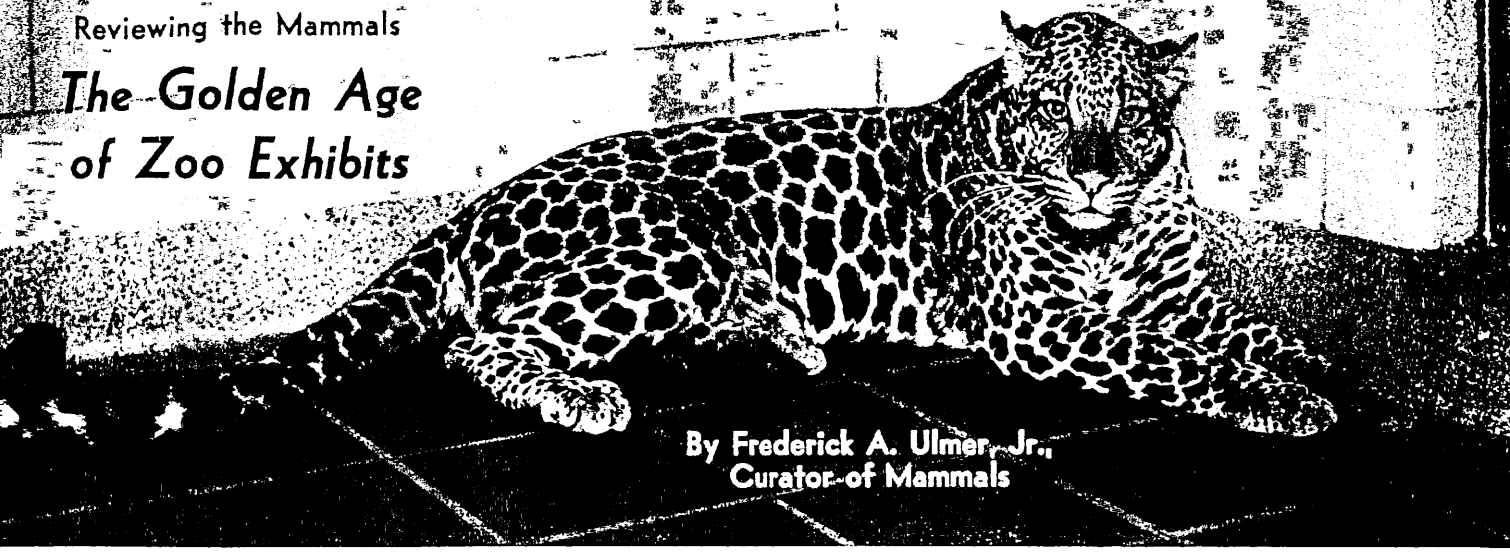
Reviewing the Mammals

The Golden Age of Zoo Exhibits



By Frederick A. Ulmer, Jr.,
Curator of Mammals

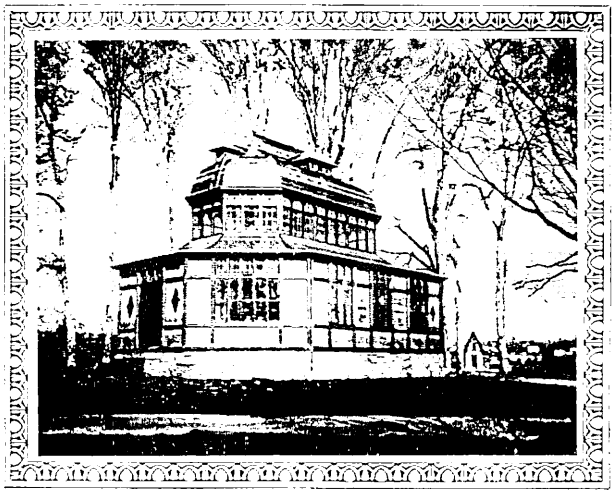
THE PARADE OF MAMMALS through the portals of America's First Zoo down through the years has been most impressive. Since the Zoo first opened its gates, no fewer than 500 species have been exhibited in its garden. This is fully one-seventh of the 3,500 recent mammals now known to science, and it represents most of the larger, more important mammals of the world, excluding of course the whales and their allies.

Even on opening day, July 1, 1874, the mammal collection was surprisingly well-rounded with forty-three species of six orders* on view. Today we have one hundred fifty-three species of ten orders. Amazing as it may seem, the order of marsupials, or pouched mammals, was far more outstanding on opening day than it is now. Ten species, including the Tasmanian devil and the dasyure, were present then, whereas today we have only five species. This can be explained by two facts—Frank J. Thompson, the Zoo's first Superintendent, returned in time for the opening day with a remarkable collection of Australian mammals and birds, and it was before the terrible slaughter of wildlife by the settlers which resulted in the Australian Government's restricting the exportation of most of that vanishing fauna.

If we exclude the marsupials, the bulk of the original collection was, as would have been expected, of North American forms that were more readily obtainable. Grizzly and black bears, the coyote, Canada lynx, and bobcat, the bison, wapiti, and pronghorn antelope all were present. A female grizzly bear named "Rose" was the star attraction in the famous Bear Pits that still survive today. She was flanked by black and cinnamon bears, and an early guide book states that the black bears were presented by the Mormon leader, Brigham Young.

The original collection included an Indian elephant. She was named "Jennie," and she was kept in a temporary barnlike building that stood not far from the present Pachyderm Building. On opening day she was chained outside near the Bear Pits, and, since the grass was high and the chain invisible, this caused some amusing incidents. Several timid persons, seeing an apparently loose elephant advancing toward them, fled for their lives.

The very first animal building erected at the Zoo was the Monkey House which stood on the site now occupied by the Small Mammal House. From an early description, it would seem that the large, central, oval cage area was divided into two sections —one for New World monkeys and one for Old World types. The public circulated around the perimeter of the building. Knowing only too well how viciously different kinds of monkeys fight when placed together, it is amazing to me that so many varieties could be mingled. I am sure that the mortality must have been high, and Arthur Erwin Brown, who became Superintendent in 1876, freely admitted that such was the case. When first opened, the Monkey House was populated by only six species—tufted and weeper cebus monkeys, vervet and green monkeys, and chacma and Guinea baboons.



The First Monkey House.

During the Garden's earliest days the small mammals shared the large library room on the first floor of "Solitude" along with the reptiles. Later they were moved to the north wing of the Carnivora Building, but this was not to be the end of their

** The term "order" is here used in its zoological sense to designate one of the main groups of mammals. The rodents constitute an order, the carnivores another, the bats still another, etc.*

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peregrinations. When the reptiles were moved into the old Aviary, they left vacant a small frame building, forerunner of the square brick building back of the present Reptile House that until recently served as a storeroom for refreshment stand supplies. This was remodeled and the small mammals were moved there in August, 1887. It was not until 1898 that they reached the present Small Mammal House. As late as the 1930's a few small mammals, like vampire bats and murine opossums, were exhibited in the Reptile House. It almost seemed as though the reptiles and small mammals were loath to part.

The Philadelphia Zoo was the first in the world to have a prairie dog "village," which was situated just across the walk from the Aviary and it was still there when I was a boy. A noble attempt to simulate nature faithfully was tried in 1876 by placing burrowing owls in the enclosure, but the rodents attacked them fiercely and the birds had to be removed. During the early days the Zoo had much trouble with prairie dogs escaping by digging out. Prior to World War II a new enclosure was installed back of the Parrot House, but it was not rat-proof and these pests eventually destroyed the colony. A new, rat-proof concrete enclosure, that requires very little maintenance, was designed and built by Zoo personnel on the same spot in 1953. This new "village" has been so successful that every year the surplus prairie dogs must be trapped out. A number have been shipped to zoos in Europe and England. Rats are no longer a serious problem in the Zoo, for during the last decade a full-time pest control man has been added to the staff. It is his job to eliminate not only rats and mice, but roaches, flies, and other unwelcome pests that trouble all zoos. A new exhibit for burrowing mammals is now being constructed adjacent to the prairie dog "village."

The Missing "Musts"

Conspicuous by their absence on opening day were such important species as lions, tigers, zebras, and camels—mammals that are virtual "musts" for any zoo. This situation was soon remedied, however, as animals that had been on order reached the Garden in quick succession. On August 11, 1874, six giraffes, five males and a female, arrived—a far greater number than the Zoo has ever exhibited at one time since! Some of these giraffes did not survive long, but one lived almost eleven years, a record for our collection. In the early days the Carnivora House was a veritable Noah's Ark, accommodating everything from kangaroos and wombats to tropical deer, elands, and giraffes—not to mention the cats it was intended for!

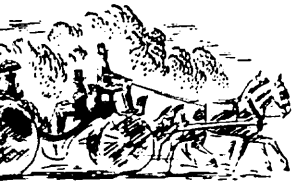
By the end of the first year the collection had risen to seventy species of seven mammalian orders. On December 28, the Zoo's first pair of lions, a Bengal tiger, and a black leopard made their debut. The first African elephant came on the very last day of the year and she cost $2,250. Since the dollar was worth a lot more then, that price actually was not too different from today's $5,000 for the same species. One of our Zoo's bulletins published in 1926 described this pachyderm as "the only full grown African elephant ever shown here," but the 1875 guide book stated she was "quite young" on arrival. I doubt that she was fully grown at the time of her death in 1879. Along with the African animal appeared a huge Indian female named "Empress" and who was destined to become the consort of the famous bull Indian elephant "Bolivar." Guide book writer Hulfish described her as "near eleven feet" tall, weighing "about seventeen thousand pounds," and "over a hundred years old!" I fear that his enthusiasm got the best of him! "Empress" cost $4,500—twice as much as her African counterpart. Today African elephants cost more than their Indian relatives.

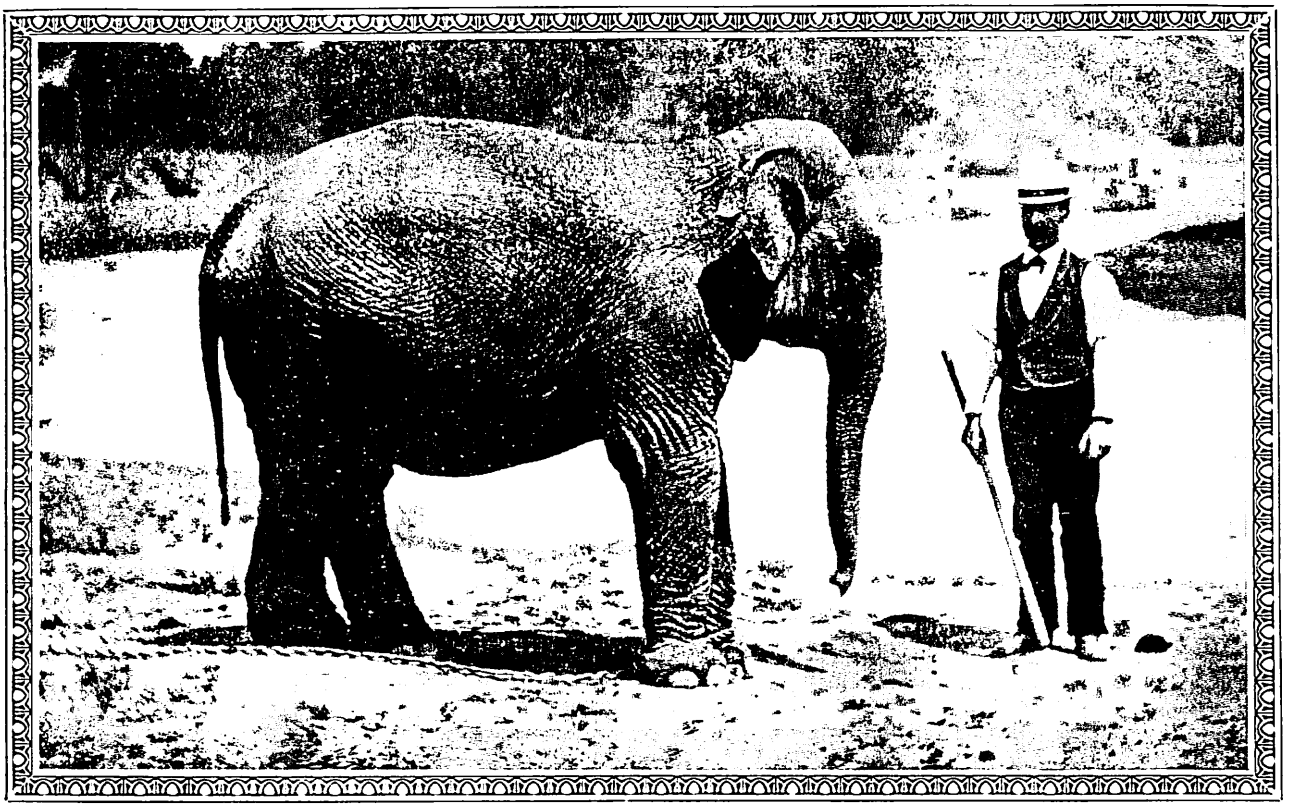
It was in 1875 that the mammal collection really came into its own, with zebras, tapirs, camels, guanacos, vicunas, and many other species being added. But the most outstanding of all was "Pete," the massive male Indian rhinoceros that the Zoo purchased from Barnum's Circus. Old "Pete" became a Philadelphia landmark and not only in life, for, after his death in 1901, he was mounted and placed on exhibit at the Academy of Natural Sciences, where he thrilled generations of small boys including myself. Now the Philadelphia Zoo had "arrived"—it compared favorably with the great zoological gardens of the Old World.

The Short-Lived Manatees

The strangest mammals to reach the Zoo in 1875 were two manatees from the Orinoco River. They were listed in the records as Amazonian manatees, a species reputed to occur in the upper Orinoco. I doubt that they really were, however, for the West Indian manatee inhabits the mouth of the Orinoco River, and the London Zoo's first manatee, received at exactly the same time as our two, was listed as the West Indian species. I suspect that all three came from the same source. The Philadelphia Zoo made elaborate preparations to ensure the survival of these unusual creatures. A spacious tank was prepared with warm brackish water, and vallisneria and other aquatic plants were provided, but, despite all this, the manatees died in less than three months. A third specimen received in June, 1876, suffered the same fate, and the Zoo then decided to give up trying to exhibit these animals. Actually the last attempt to keep one here was in 1922 when the late C. Emerson Brown personally escorted one to the Zoo from Florida. I was six years old at the time, and I pestered my parents to take me to see it. I was bitterly disappointed when it died a day after its arrival.

Even the highlights of the Zoo's mammal collections cannot all be recounted here. The first chimpanzees arrived in 1878 and the first orang-utan in 1879 (*Fauna*, Vol. 8, No. 4, Dec., 1946), but these early anthropoids did not live long. Since then, we have established world longevity records with all three great apes (gorilla—31 years 7 months; chimpanzee—34 years 9 months; and orang-utan—27





Jennie, a young Indian Elephant, unquestionably was one of the big attractions at the Zoo on Opening Day.

years 10 months) and many other primates as well. Among other records are the first chimpanzee bred and successfully reared in America and the first orang-utan bred and successfully reared in the world.

In recent years many important mammals have bred at the Philadelphia Zoo. Our pair of hippopotami have produced four offspring, three of which are scattered in zoos from Ohio to California. Black leopards born here can be seen in several American zoos and a pair of our famous orang-utans (*Parks and Recreation Magazine*, Vol. 38, No. 5, May, 1955) now reside in Birmingham, Alabama. Fennec foxes are rarely born in captivity but since 1954 we have produced some each year (*America's First Zoo*, Vol. 7, No. 4, Dec., 1955). Probably the most difficult zoo animal to breed is that fleet feline, the cheetah, and the Philadelphia Zoo is the only one in the world to succeed in doing so. Unfortunately the pair born in 1957 died of distemper at three months of age (*America's First Zoo*, Vol. 9, No. 3, Sept., 1957).

The Zoological Society of Philadelphia was the first to exhibit the elephant seal. That was in 1883 when no less than five individuals of the northern species were purchased. The official records do not list the even larger southern elephant seal, but one was boarded and exhibited here during the winter of 1933-34. This really tremendous beast, named "Goliath," had traveled with Ringling's Circus and was most impressive. Measuring seventeen feet long and weighing three tons, he was housed in the outdoor elephant bathing pool, where he spent most of the day and night submerged. At feeding time he emerged from the pool, and, when holding his head erect, towered above the keeper. It took a barrel of fish a day to satisfy his enormous appetite!

Rare Deer Exhibited

Among the rare deer that have lived at the Philadelphia Zoo was the pudu (1877), the smallest species of all, and one that stands little more than a foot high and hails from the high Andes of South America. In 1875 the Garden received several caribou from Maine. If they were woodland caribou, and I suspect they were, then they represented a species now virtually extinct in the United States and rare even in Canada. Other extremely unusual deer were the Javan rusa and Prince Alfred's rusa. The diminutive mouse deer, or chevrotain, was exhibited at the turn of the century. Nowadays, because of quarantine restrictions, it is rarely seen in American zoos.

It is among the Australian mammals that we find the greatest number of rarities that have been on display at the Philadelphia Zoo. The list is long and includes the rabbit-eared bandicoot, the bridled nail-tailed wallaby, Gaimard's rat kangaroo, and the toolache wallaby—the last two of which are now extinct. A short-beaked echidna lived here for 49½ years—a longevity record which may never be broken.

In the early years the beautiful Arabian white oryx was regularly on display. Today a pitifully

small remnant is making its last stand in Saudi Arabia, and will soon be gone if something is not done to save it. Other rare antelopes that the Zoo has had were the bontebok, the gemsbok, the red hartebeest, and the bubal hartebeest. The last is now extinct and the Zoo's last specimen, which died in 1905, is preserved at the Academy of Natural Sciences. The Cape mountain zebra, Persian wild ass, Mongolian wild ass, and Przewalsky's horse are rare equines that have lived here.

Oddly enough, the Antelope House was not always known by that name. For many years it was referred to as the Winter House for Deer and housed a rather strange array of animals, including at one time or another an orang-utan and an elephant. John Regan, former Head Keeper, recalls that even in his day the older keepers invariably called it the Deer House. On the lawn south of the Sea Lion Pool formerly stood a building now all but forgotten. It was the Zebra House, built in 1905 and with six cages. Originally it was intended that visitors should view the animals only in their outdoor cages, but since they were kept indoors during much of the winter, many people complained. So it was altered in 1909 to allow visitors inside. The passage was dark and narrow, with the animals uncomfortably close to you, particularly the wicked Mongolian wild ass stallion. A pot-bellied stove, standing at one end, warmed the structure. When the Zebra House was torn down in 1934 its last occupants, the wild ass, an eland, female anoa, two peccaries, and a female African buffalo were moved to the Antelope House.

The Invisible Circle

The present zebra cages stand opposite the Service Building, and many visitors pause to admire, not only the animals, but the handsome stone shelters built by WPA stone masons in 1942. Many are puzzled when they hear oldtimers among the Zoo staff refer to these six enclosures, all very rectangular, as The Circle! The explanation is actually simple enough. For many years, dating back at least as far as 1878, a curious circular structure stood on this spot. It consisted of a round central shelter bizarrely decorated with rustic filagree-work. From this radiated eight outdoor cages in all directions, like the spokes of a wheel. This type of exhibit for hoofed mammals was quite popular in European zoos during the Victorian Period, and it was adopted by America's First Zoo. Wild cattle, sheep, goats, and antelopes were exhibited here for many years. The Circle disappeared in 1925, but its name persists among the Zoo employees until this day!

Because the Philadelphia Zoo was, at its inception, unique in America as a scientifically directed zoological collection, the Smithsonian Institute, of Washington, D. C., took great interest in it and contributed a group of white-nosed coati-mundis for opening day. In 1886 they sent us a rare Cuban solenodon that had been the subject of scientific study by the Biological Society of Washington. This unique insectivore thrived here for almost six years and is now also in the Academy's collection. Some years ago, it was feared that the Cuban solenodon was extinct, but recently it has been rediscovered in Fidel Castro's stronghold, the Sierra Maestra of southern Oriente Province.

Another rare mammal from the Caribbean area was exhibited in Philadelphia in 1897 when three West Indian monk seals were purchased from a fish dealer in Pensacola, Florida. They were captured on a reef off the coast of Yucatan. Unfortunately, they survived only a short time, refusing to eat as have so many of the true seals we have attempted to exhibit. Today the West Indian monk seal is verging on extinction, due mainly to uncontrolled hunting of these trusting creatures.

What of the mammals the Zoo has yet to see in its collection? There are some very important ones that have been conspicuous by their absence, such as the okapi, the giant panda, the mountain gorilla, the bongo, the giant eland, and the walrus. We would like very much to see these marvelous mammals represented here, but before we attempt to get them, potential accommodations for them must be greatly improved. We are proud of our modern barless Pachyderm Building (opened in 1941) and the magnificent new Carnivora Building (1951) which is without equal in all the world, but our Antelope House is a barnlike relic that dates back to 1877 when it cost a mere $18,000. The present Small Mammal House was built on the foundations of the original Monkey House in 1898 at a cost of $6,535, and the wing was added in 1924. The Monkey House is another antique that dates back to 1896, and, whereas the monkey side was completely rebuilt last year, the cages of our splendid great apes suffer severely by comparison. They occupy a sunken area that originally was a conservatory. Here the first ape cage was installed in 1908.

Our Famous Anthropoids

For many years the Philadelphia Zoo has had a collection of anthropoid apes without equal in all the world. Our long range plans call for modern quarters that will be much more in keeping with this notable collection, and it is hoped that our dreams will be realized in the not too distant future. Plans are also well under way for improving the Small Mammal House. All the exhibits will be behind glass to eliminate odors and to ensure a proper diet, and strictly nocturnal mammals will be exhibited in subdued light to simulate nighttime. Anteaters and aardvarks, which have had inadequate quarters in the Kangaroo House, will also be displayed in the Small Mammal House.

Much has already been accomplished in the direction of making exhibits more attractive. The outdoor Lion Grotto has been planted with thorny trees and shrubs to simulate the vegetation of East African lion country. Bamboo and giant grasses grow so lush on the Tiger Grotto that, when the big cats emerge from indoors, one has the feeling of being on a tiger hunt in India. In 1951 an attractive new Otter Pool, designed and constructed by

Zoo personnel, was opened in front of the Antelope House. Later both this and the Sea Lion Pool were tiled in pale green, rendering the animals much easier to see in the water.

After "Jim," the Baringo giraffe, died in 1952, a hay room adjoining the single giraffe cage was torn out to make room for a second enclosure for these tall creatures. In the past the Zoo had had bad luck with pairs of giraffes, the females frequently dying of mysterious injuries. It was suspected that fighting took place in the single cage during the hours when the keepers were off duty. After a trying arrival in a blinding snowstorm on November 6, 1953, the beautiful pair of reticulated giraffes soon settled down. They are together all day, but separated at night.

The Kangaroo House was built in 1907 with "eight inside pens capable of subdivision," and, all too soon, they were divided into dark narrow stalls. Recently the extra partitions were removed on the south side of the building, making the cages much roomier and better lighted. This has resulted in a more attractive exhibit for visitors, and the animals are doing much better.

Although the Zoo officials reluctantly decided back in 1876 to give up trying to exhibit manatees, I think that they should be given some thought in the future. An Aquatic Animal House, where these and other aquatic mammals could be exhibited in aquarium-type cages, would be an exciting and novel addition to the present collection. In recent years several European zoos have exhibited manatees with marked success, and the Frankfurt Zoo kept one for ten years.

What about the future of the Philadelphia Zoo? I fear I must close on a somber note. Zoos are now experiencing their Golden Age, displaying many fabulous creatures that were not even known to science a hundred years ago. But the world is changing fast, and the large, spectacular mammals are rapidly fading from the scene. Unless the incredible recent explosion in the human population on this globe reverses itself, there will be no room at all for the larger mammals. Despite the remarkable breeding records that have been established in modern zoological gardens, we are still almost completely dependent upon wilderness areas for the bulk of our animals.

An animal rarity, still remembered by Zoo visitors, was Goliath, an enormous Elephant Seal which was on exhibit in the Garden for a short period in 1933-34.