

SMITHSONIAN INSTITUTION.

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ANIMALS DESIRED

FOR THE

NATIONAL ZOOLOGICAL PARK

AT

WASHINGTON, D. C.,

UNITED STATES OF AMERICA.

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WASHINGTON:

GOVERNMENT PRINTING OFFICE.

1899.







- |                    |                |
|--------------------|----------------|
| 1. OFFICE          | 11. GUANACO.   |
| 2. CARNIVORA HOUSE | 12. LLAMAS     |
| 3. ANTELOPE HOUSE  | 13. BISON      |
| 4. ELEPHANTS       | 14. ZEBU       |
| 5. AQUARIUM        | 15. GOATS      |
| 6. DOG KENNELS.    | 16. ANTELOPE   |
| 7. BEAR DENS       | 17. RESTAURANT |
| 8. SEA LIONS       | 18. BEAVER     |
| 9. HARBOR SEALS    | 19. WORKSHOP   |
| 10. ELK            |                |

MAP  
OF THE  
**NATIONAL  
ZOOLOGICAL PARK**  
WASHINGTON, D. C.  
U. S. A.

Scale: 100 300 600 FEET  
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WASHINGTON, D. C.  
U. S. A.

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SMITHSONIAN INSTITUTION.

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NATIONAL ZOOLOGICAL PARK

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WASHINGTON, D. C.,  
UNITED STATES OF AMERICA.

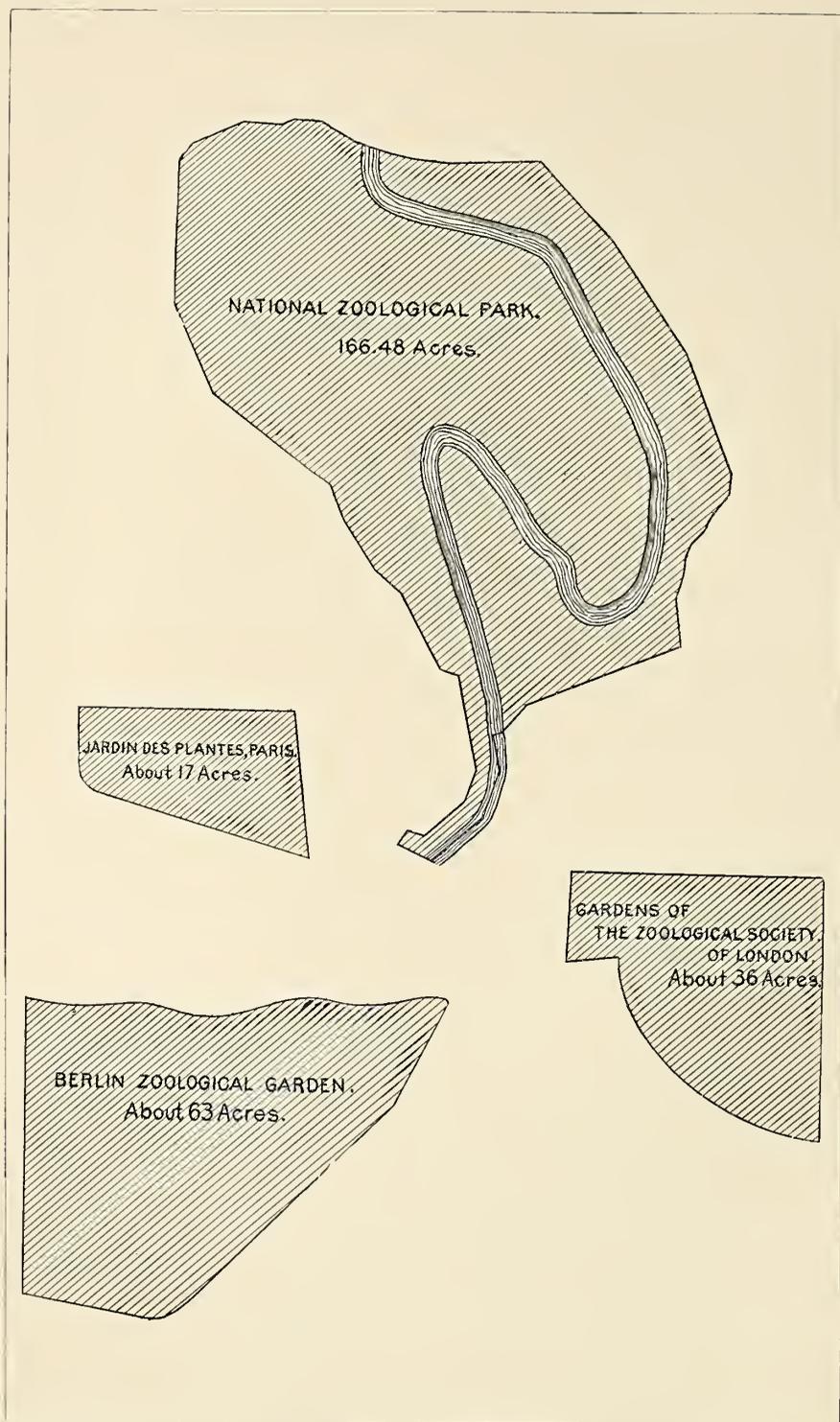
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WASHINGTON:  
GOVERNMENT PRINTING OFFICE.

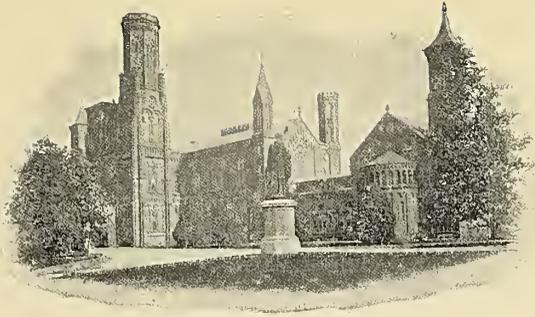
1899.







AREAS OF ZOOLOGICAL PARKS.



SMITHSONIAN INSTITUTION,  
*Washington, U. S. A., July 1, 1899.*

The Secretary, on behalf of the Regents of the Smithsonian Institution, and with the permission of the honorable the Secretaries of State, of War, and of the Navy, calls the attention of officers of the United States on foreign stations to the fact that there is at the capital a National Zoological Park, established by an act of Congress approved April 30, 1890, which provides—

That the National Zoological Park is hereby placed under the direction of the Regents of the Smithsonian Institution, who are authorized to transfer to it any living specimens, whether of animals or plants now or hereafter in their charge, to accept gifts for the park at their discretion, in the name of the United States, to make exchanges of specimens and to administer the said Zoological Park for the advancement of science and the instruction and recreation of the people.

That the heads of the Executive Departments of the Government are hereby authorized and directed to cause to be rendered all necessary and practicable aid to the said Regents in the acquisition of collections for the Zoological Park.

This park, of which some idea may be formed by the accompanying map and illustrations, has been established in an unusually beautiful site near the city of Washington. It is intended to form here a representative national collection which, while especially rich in our native American animals, shall also contain specimens from all parts of the world, and shall be to America what the zoological gardens at London, Paris, and Berlin are to their respective countries.

For several years Congress made no appropriation for the purchase of animals, and the park is still largely dependent upon gifts to increase the collection, which is far from adequate as an exhibit in a national institution.

If officers stationed abroad, who may be interested in animal life, would bear in mind the necessities of the park, many additions could be made to the collection. Almost any foreign animals would be gladly received.

Expenses of boxing and of land transportation, where necessary, will always be paid by the Zoological Park.

Purchase of animals can be made only in exceptional cases, but if the opportunity for any especially desirable acquisition arises, the Secretary of the Smithsonian Institution would be pleased to be advised by letter, or in urgent cases by telegraph. The Secretary would also be glad to correspond with officers who expect to visit regions where interesting animals occur.

Public recognition of gifts is made, the names of donors being placed upon the labels attached to the cages or pens, and a notice of the gifts with the names of the donors is also made a part of the annual report of the Secretary of the Smithsonian Institution.

A list of the most important animals that can be collected in different countries is appended hereto, and concise directions for boxing, shipping, and feeding are given.

S. P. LANGLEY,  
*Secretary.*

## ADVICE TO COLLECTORS.

### ANIMALS ESPECIALLY DESIRED.

The new possessions of the United States are comparatively poor in animals, but it is especially desirable to have as full a representation of the fauna as possible. While all will be valued, those whose names are italicised are particularly desirable.

CUBA AND PORTO RICO afford the *manatee*, or sea-cow, which frequents bays and mouths of rivers; the *flamingo*, spoonbill, ibis, pelican, several species of parrots and parrakeets, a variety of pigeons, the ani, and other interesting birds. Boas of several kinds occur in these islands, and large lizards of different species are very abundant. The agouta (*Solenodon*) and the hutia (*Capromys*), animals a little larger than a common rat, and the crocodile are also found in Cuba, and an interesting macaw occurs in the Isle of Pines.



FLAMINGO.



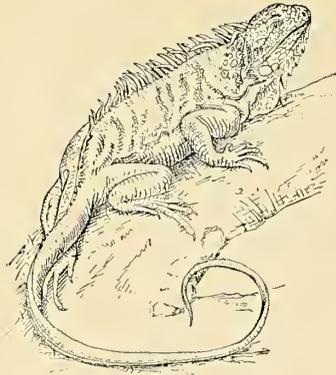
TARSIER.

In the PHILIPPINE ISLANDS the most notable mammals are the "tamarau," a small wild buffalo found on Mindoro, several species of deer, the "babui," or wild hog, monkeys of two species, a small cat, two species of civet cat, or musang, fruit-eating bats of different species, several peculiar large rats, the *colugo*, or *flying lemur*, and the very remarkable and interesting *tarsier*, or "magou." Among these the last two and the "tamarau" are especially important. Specimens of the domesticated buffalo also are desired.

Of the birds, the eagles, hornbills, cockatoos, parrakeets, the pheasants and pigeons, the megapod, pelican, and the ground cuckoos are perhaps the most important. Among these, any *hornbills* or brilliant-plumaged *cockatoos* and *parrakeets*

would be specially valued, but specimens of all the larger birds, of both land and water, are desired. The python and other snakes, large lizards and turtles would also be acceptable.

Below are mentioned a few of the more notable animals to be found in other regions, and those which are especially desired.



IGUANA.



SLOTH.

CENTRAL AMERICA.—*Tapir*, manatee, West Indian seal, *jaguar*, other cats (except the puma), monkeys, *sloth*,

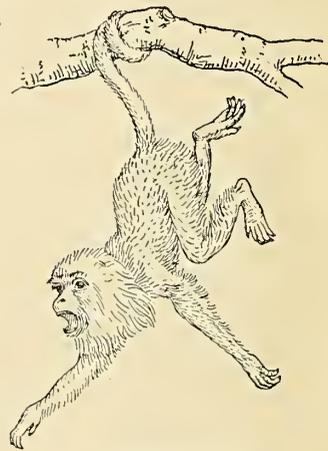
*anteater*, *coati-mundi*, *tayra*, *kinkajou*, tree porcupine, and other large rodents, curassows, parrots and macaws, *king vulture*, flamingo, spoonbill, ibis, crocodiles, large snakes, *iguanas* and other large lizards.

SOUTH AMERICA.—From the great river valleys of the east and north the following animals are desired:

*Tapir*, *sloth*, *anteaters*, *great armadillo*, *jaguar*, other cats (except the puma), otter,



TAPIR.



HOWLER MONKEY.

raccoon, wild dogs and foxes, deer, white-lipped peccary, *monkeys* and marmosets, capybara, viscacha, paca, coypu, porcupine and other large rodents, curassows of various species, guans, tinamous, toucans, parrots and macaws, *harpy* and other eagles, *king vulture*,

*cariama*, screamers, jabiru, flamingo, spoonbill, scarlet ibis, and other large wading birds, caimans, large snakes and large *lizards*.

Farther to the south occur the guanaco, the Patagonian cavy, the rhea, or American ostrich, the coscoroba and black-necked swans, and several species of geese and penguins, and among the mountains of Chile, Peru, and Bolivia are found the alpaca and vicugna, the chinchilla, the rare *spectacled bear*, and the *condor*.

ASIA.—Southern Asia and the adjacent islands afford the rhinoceros (three species), elephant (female only is desired), *tapir*, buffalo, *gayal*, *gaur*, antelopes, gazelles, deer, chevrotains and muntjacs, wild swine, tiger, leopard, *cheetah* and smaller cats, ichneumons, civet cats, bears, orang, gibbons, langurs and related species, proboscis monkey, macaques of various species, black ape, lemurs and fruit-eating bats; also eagles, vultures, hornbills, pheasants, jungle fowl, tragopans, fruit-pigeons, etc., and crocodiles, pythons, and large poisonous snakes.

On the highlands of the interior are found a number of rare and superb mountain sheep and antelopes, several of which, as the argali or Pamir sheep, the serow, and takin, have never as yet been on exhibition in any American or European zoological garden. The same region affords the musk deer, ounce or snow leopard, yak (female chiefly



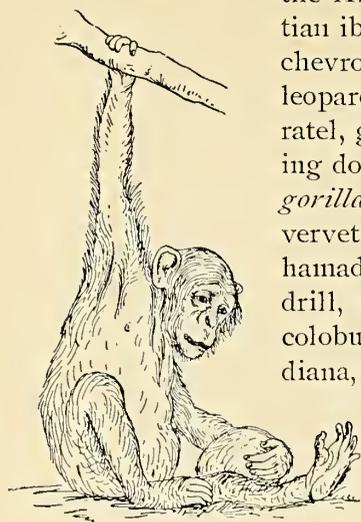
RHEA.



ARGALI OR PAMIR SHEEP.

desired), and rare pheasants. The Bactrian camel and the wild ass also may be had there. In Japan may be had the Japanese bear, a deer, a peculiar goat-antelope, an interesting monkey, the raccoon-like dog, otter, badger, wild swine, and pheasants.

AFRICA.—No other region is so rich in animal life as this continent, from which are desired the elephant, hippopotamus, rhinoceros, zebra, quagga, buffalo, giraffe, antelopes of any species, gazelles,



CHIMPANZEE.

the Abyssinian ibex, the "beden" or Egyptian ibex, the Barbary sheep or "arui," water chevrotain, the wart hog and river hog, lion, leopard, cheetah and any smaller cats, zorilla, ratel, genets, ichneumons, suricate, Cape hunting dog and aard wolf, jackals, foxes, hyenas, gorilla, chimpanzee, the chacma baboon and vervet monkey of South Africa, the gelada and hamadryas baboons of Abyssinia, the mandrill, drill, and other baboons, several species of colobus and mangabey, the green monkey, diana, mona, pluto, and other nearly related

species of West Africa, the Barbary ape, lemurs, fruit-eating bats, coney, aard vark, and pangolin, eagles, vultures, secretary bird, parrots and parakeets, hornbills, doves, fruit-pigeons, touracous, francolins, guinea fowls,

bustards, the larger wading and water birds, etc., also the ostriches of Somaliland and North Africa, etc., crocodiles, large tortoises, pythons, vipers and other poisonous snakes, monitors and other large lizards. The gorilla has never yet been brought to America. Special care would have to be taken in boxing, feeding, and caring for a specimen. The giraffe has almost ceased to be found in any European or American collection. The true zebra of Southern Africa is almost extinct. This region affords nearly one hundred species of antelopes and gazelles and any of these would be especially valued. The secretary bird, though not rare, would be interesting; but any of the above would be acceptable.

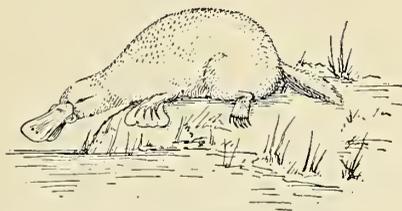


ZEBRA.

Madagascar affords a wonderful variety of lemurs, the strange and interesting aye-aye, fruit-eating bats, a peculiar cat-like animal known as the fossa, civet cats, the river hog, several large snakes, and a number of desirable birds.

AUSTRALIA AND ADJACENT ISLANDS.—*Kangaroos* and *wallabies* of any species, koala or native “bear,” *wombat*, thylacine, dingo, “*Tasmanian devil*,” phalangers or opossums, bandicoots, echidna or “spiny ant-eater,” and *platypus*; cassowaries, emeu, lyre-bird, parrots, parrakeets, and cockatoos, fruit pigeons, megapod, brush turkey, black swan, birds of paradise, etc., and large snakes and lizards. The living platypus, or duckbill, is not represented in any American collection. It is somewhat difficult to procure, and demands particular care as to quiet and special food in transport, but hardly any animal would excite so general an interest or reflect more credit on its collector.

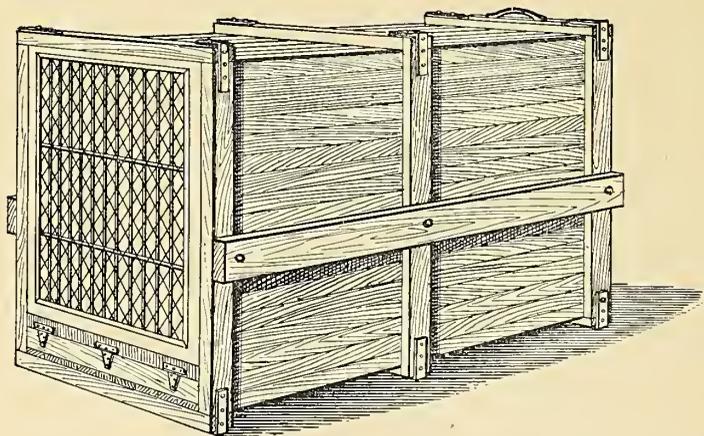
NEW ZEALAND.—Kiwi or apteryx, owl-parrot, parrots, and tuatara lizard.



PLATYPUS.

## BOXING.

*General instructions.*—The larger animals, all adult flesh-eating animals, and most other species that are not gregarious should each be given a separate box or compartment. The smaller monkeys may be shipped together, but the adults of the larger species are likely to be ill-natured and should be shipped separately, as should also antelope, deer, and sheep, even though young. The young of most other animals may be shipped together.



SHIPPING BOX.

An illustration of a large shipping box is given above, and detailed plans of the same are shown upon the opposite plate. Similar boxes varying in size according to the size of the animals to be transported can readily be made by any fairly good carpenter and blacksmith. All boxes should be high enough to allow the animals confined in them to stand erect. The inside should be smooth, all cleats, etc., required to strengthen the box being put on the outside. Care should be taken that no nails project inside. Except in metal-lined boxes; holes for ventilation should be bored in the upper part of the box. No cracks should be left near the bottom, as the animals would be liable to get their feet caught in them.

The space in front, between the grating and the bottom of the box, should be kept closed by a removable footboard, except when the animals are being fed or watered. The rear doors should be kept locked, all feeding and cleaning being done through the other openings.





A plan is given in the same plate of an iron scraper, which is the handiest implement for cleaning out the cages. It should be of a size and weight to suit the cages in which it is to be used, the handle to be several inches longer than the cage.

These directions and the accompanying plan call for some materials that can only be had from a well-appointed hardware store. It is to be expected that in many cases such materials can not be obtained, and that the plans will then be varied to suit the occasion, stout bars of wood taking the place of iron rods, slats being used instead of wire netting, etc.

*Lions, leopards, and other large cats.*—The box should be a little longer than the animal and wide enough to permit it to turn around. The front end should be closed by a grating of five-eighths-inch vertical iron bars, 3 inches apart. A space of 3 inches should be left between this grating and the bottom of the box, so that a water pan and food may be passed in. There should also be a frame covered with stout wire netting to fit over the grating on the outside and prevent the animal from reaching out. The rear end should have an opening the full height of the box and wide enough to admit the animal. This should be fitted with a door sliding down from above. A little straw or other like material should be put in the box for bedding.

*Bears.*—Boxes for bears should be of the same style as for the large cats, but they should be stouter and have a lining of sheet iron.

*Deer, antelope, sheep, and goats.*—Boxes for animals having horns and hoofs should be long enough to permit their stepping back and forth, and of a width sufficient to permit them to stand comfortably, but *not to turn around*. The upper part of the front end should be made of slats an inch apart, and at the bottom should be a sliding door 6 inches high and the full width of the box. The sliding door at the back should be the full width of the box and high enough to admit the animal. Inside, across the bottom, thin cleats, to give secure footing, should be nailed about 6 inches apart. Sand should be scattered on the bottom, and over this a little straw. No cracks should be left between the boards except in front, as the horns might be caught in them.

*Kangaroos* may be boxed in much the same manner as antelope, but the boxes should be wide enough to allow the animals to turn around easily and the rear door be only wide enough to admit the animal.

*Hippopotamus and rhinoceros.*—Boxes should be wide enough to allow the animal to sway from side to side, but not to turn around.

The front end should be closed with a grating of 1-inch vertical bars, 5 inches apart. Two or three stout planks set vertically, with 4 or 5 inches space between, will answer if iron bars can not be had. A space of 5 or 6 inches should be left between this grating and the bottom of the box. There should be a stout bar across the rear end, with 4 inches space between it and the bottom for cleaning out. The rear door, sliding up, should fill the entire space above this bar. Cleats should be nailed across the bottom inside; a little sand should be scattered on it, and over this a good bedding of straw or similar material.

A box for a rhinoceros should have the top, over the animal's head, lined with heavy sheet iron.

*Tapirs and swine.*—Boxes for these animal should be similar to the last, only lighter, and with bars 3 inches apart and with 3 inches space at bottom, in front and back.

*Monkeys.*—Boxes should be large enough to allow the animals to move about. The front may be of heavy wire netting or a grating of light bars, with a space of 2 inches at the bottom for putting in water pan and food and for cleaning out. A piece of burlap or blanket should be tacked across the top edge in front, to be let down when the temperature is low or the box is being moved. A little bedding of straw or similar material should be put in.

Monkeys bear transportation best when several are sent together, but any that are vicious must be shipped by themselves.

*Rodents.*—Boxes for gnawing animals should be similar to those for monkeys, but lined with tin or sheet iron. Of most species it will be safe to put several individuals together.

*Small cats, weasels, etc.*—Boxes should be of sufficient size to permit free movement. Front should be closed with stout wire netting or light iron grating, a space being left at the bottom for food and water.

*Birds.*—Boxes for birds should have tight back and bottom. For the other three sides and top a frame covered with wire netting will answer, burlap or other cheap material being put over this to protect the birds from drafts. The front may be kept uncovered except when the box is being moved.

Boxes for long-billed birds should have a door in the front so that a pail or other deep vessel for water may be set inside.

Parrots and macaws require metal cages, as they quickly destroy wood.

Boxes for ostriches, emeus, and cassowaries should be tight to a height of about 6 inches above the level of the bird's back. Above that point the sides, and also the top, should be made of slats, with

the space between them so narrow that the bird can not put its head through. The sides of the box should be padded up to the level of the bird's breast.

There should be a sliding door in one end of the box sufficiently large to admit the bird, and this will also answer for putting in pail for water and feed.

Hay is most satisfactory for bedding, but other dry material of similar character will answer. This bedding material should be cut into short lengths, otherwise the bird will get it twisted about its feet.

*Reptiles.*—Snakes may be shipped in boxes having tight sides and bottom and top covered with small-mesh wire netting. An old blanket or some soft, dry grass should be put into the box, also a little sand.

Iguanas and other lizards require the same style of box as snakes. Dry sand only should be put in the bottom.



THE LLAMA HOUSE.

## FEEDING AND CARE.

*General instructions.*—It is not expected that the directions for feeding, given below, can always be closely followed. It may happen that the articles specified are not obtainable, and that others not mentioned, but equally good, can be had in abundance.

Whenever the animals to be shipped have been for some time in captivity it will be advisable to obtain full information regarding the manner of caring for them, and the food to which they have been accustomed.

Care should be taken that animals are not overfed; if they do not eat all that is given them the quantity should be reduced at once.

Such animals as antelope, deer, hippopotamus, etc., that have been fed on hay and grain, will relish fresh grass and other green food when it is obtainable, but it should be given in small quantities at first.

The cages should be cleaned each day, and all remnants of food should be removed as soon as the animals finish eating.

Water should be given twice a day. The pan should be taken out when the animal is through drinking. The pan is best put into the cage empty, then filled from a common sprinkling pot which has had the "rose" removed.

Any animals that die should of course be removed at once.

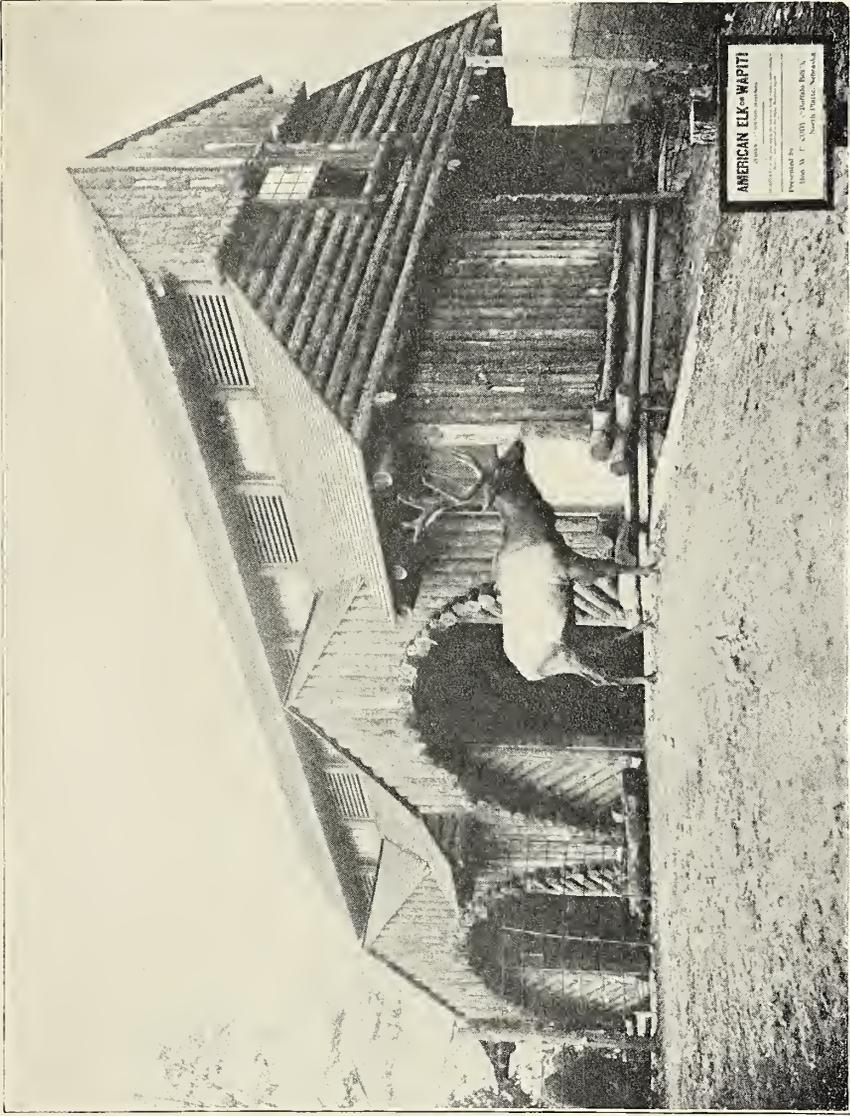
*Flesh-eating animals.*—An adult lion or tiger requires about 10 pounds of meat, including bone, once a day; a leopard or panther about 5 pounds; an ocelot or wild cat  $2\frac{1}{2}$  pounds; smaller animals in proportion. The meat should be given "on the bone" whenever possible, as this compels the animal to eat slowly.

The cheetah requires very careful feeding, and it will be best, before shipping, to secure a supply of live chickens or other fowls for its food while in transit.

Bears are omnivorous, and may be fed dry bread, biscuits, boiled rice with sugar, vegetables, and fruit. They do not require meat.

The civet cat, ichneumon, coati, and kinkajou require bread and milk, boiled rice, and milk with sugar, fruit, and a little meat. Small birds and mice will be relished.

*Insect-eating animals.*—Anteaters and armadillos should have boiled milk beaten up with raw egg. The great anteater will take



**AMERICAN ELK - WAPITI**  
The American Elk, or Wapiti, is a large deer-like animal with large, branching antlers. It is found in the mountainous regions of the western United States and Canada. The photograph shows a large male elk standing on the porch of a log cabin. The elk's antlers are fully developed and show a complex, branching structure. The cabin is a traditional log structure with a steep roof and a porch. The scene is set outdoors on a dirt path.

Presented by  
The Wapiti Club, Wapiti Park, Wyoming



from two to three pints, with two eggs, and the small species one pint and one egg. They should also have raw meat finely minced and entirely free from long fibers.

*Vegetable-eating animals.*—Antelope, deer, etc., require hay, oats, or dry bran and oats mixed, and a little green food can be used when obtainable.

Hippopotamus and rhinoceros should be given hay, fresh green food when obtainable, carrots, beets, and other roots. Mixed bran and oats should also be fed, to be moistened for the rhinoceros and thoroughly wet for the hippopotamus.

Tapirs require great care in feeding. Hay, straw, beets, or carrots cut up and mixed with bran may be fed, also boiled rice or potatoes, sweet potatoes or yams, bread, biscuits, boiled Indian corn with grass, cabbage leaves, and small branches of trees. Constant care and watchfulness will be required to arrange a diet upon which the animal will thrive.

Sloths require fruit, such as bananas, figs, etc., lettuce and other green food; also bread and milk.

Kangaroos may be fed on hay, with oats and bran, roots of all kinds, and apples; also green food, such as grass, cabbage leaves, and beet tops.

Rodents will eat green food, roots of any kind, apples, bread, biscuit, etc.

*Birds.*—Parrots of the larger kinds will eat Indian corn, oats, buckwheat, dry biscuits, apples, pears, grapes, and the various tropical fruits; also lettuce, cabbage leaves, and other green food. The smaller kinds require the same sort of food, except that millet, hemp and canary seed should be used instead of the larger kinds.

Marsh and water birds will eat small fish, or larger fish cut into small strips; also fresh meat cut into small pieces.

Eagles, owls, and other birds of prey should have fresh meat and fish cut into strips. Live birds, mice, and rats should be given them occasionally when obtainable.

Ostriches, emeus, and cassowaries require beets, carrots, and other roots, cut into small pieces, cabbage leaves, lettuce, etc., also a small quantity of oats and a very little corn. The food should be varied from day to day as much as possible.

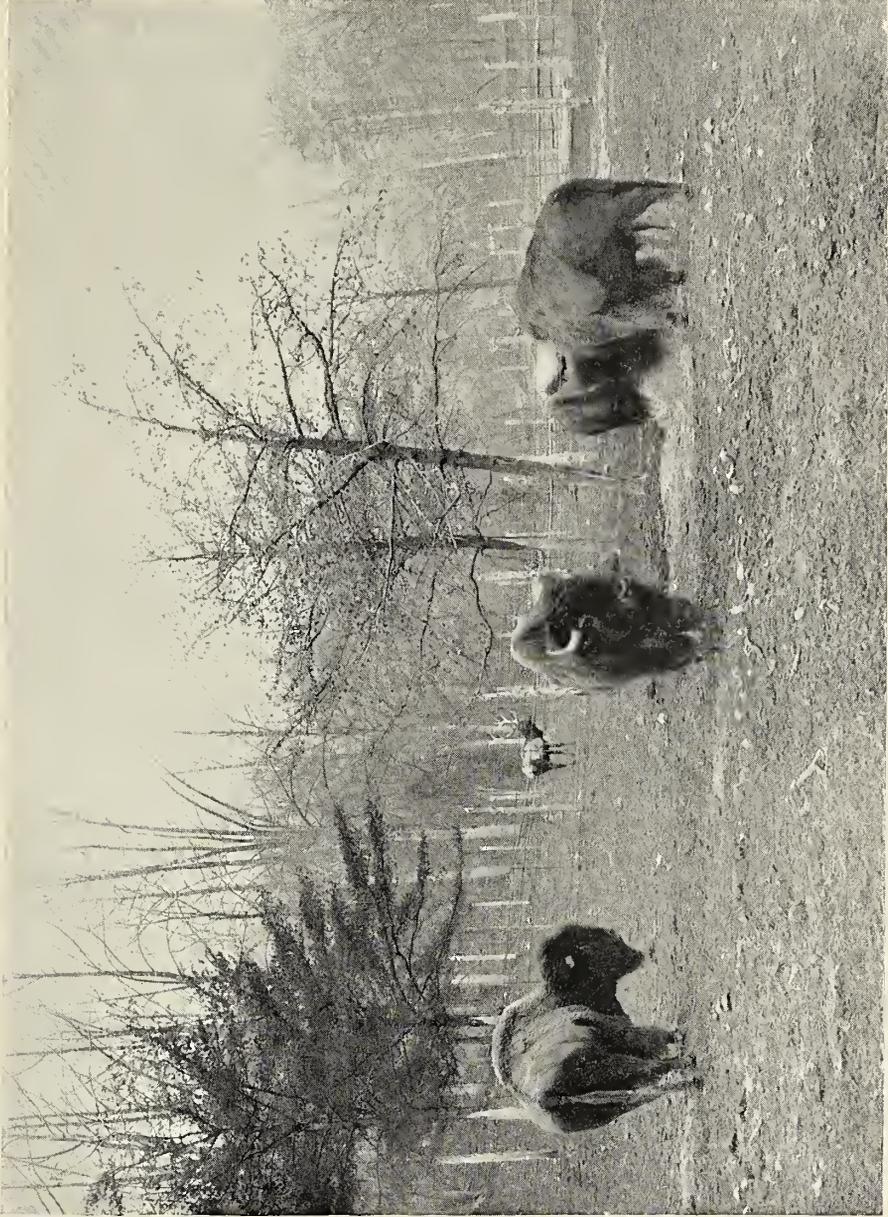
*Reptiles.*—Some lizards are exclusively vegetable feeders, while others eat only insects, and in many cases it will be necessary to try them with different kinds of food in order to ascertain what they require. For the iguanas and others requiring vegetable food, lettuce, leaves of cabbage, mangrove, etc., and various fruits may be used. Many of the insectivorous species will eat cockroaches and

ants. Eggs, both raw and hard boiled (minced finely), should be tried.

It will not be necessary to feed snakes while in transit, as most of them are able to go for a considerable time without food. It is well, however, where it can conveniently be done, to feed them just before shipping. They should be sprinkled with water once in every two or three days, when this can be done without wetting the blanket.

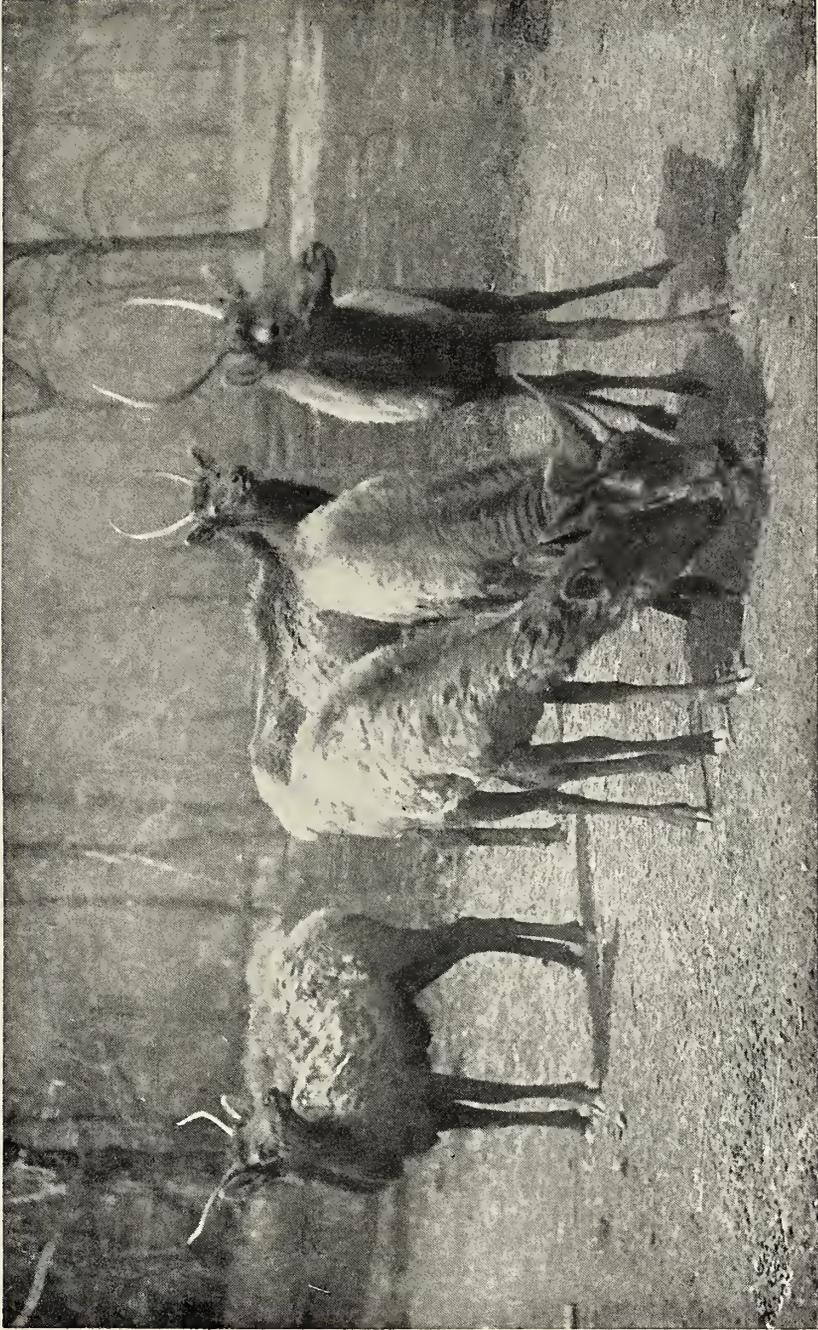


RACCOON IN ZOOLOGICAL PARK.



GROUP OF BUFFALO.  
National Zoological Park





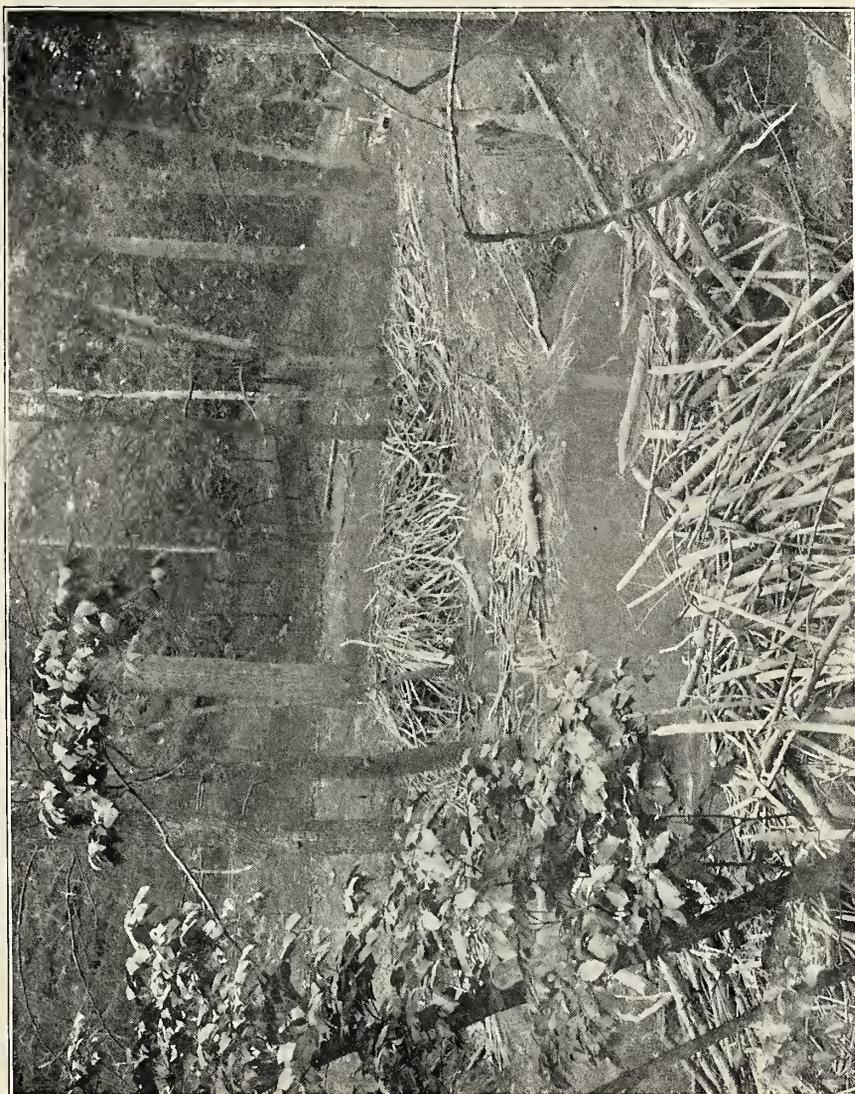
YOUNG ELK IN ZOOLOGICAL PARK.





PRONG-HORN ANTELOPE, NATIONAL ZOOLOGICAL PARK.





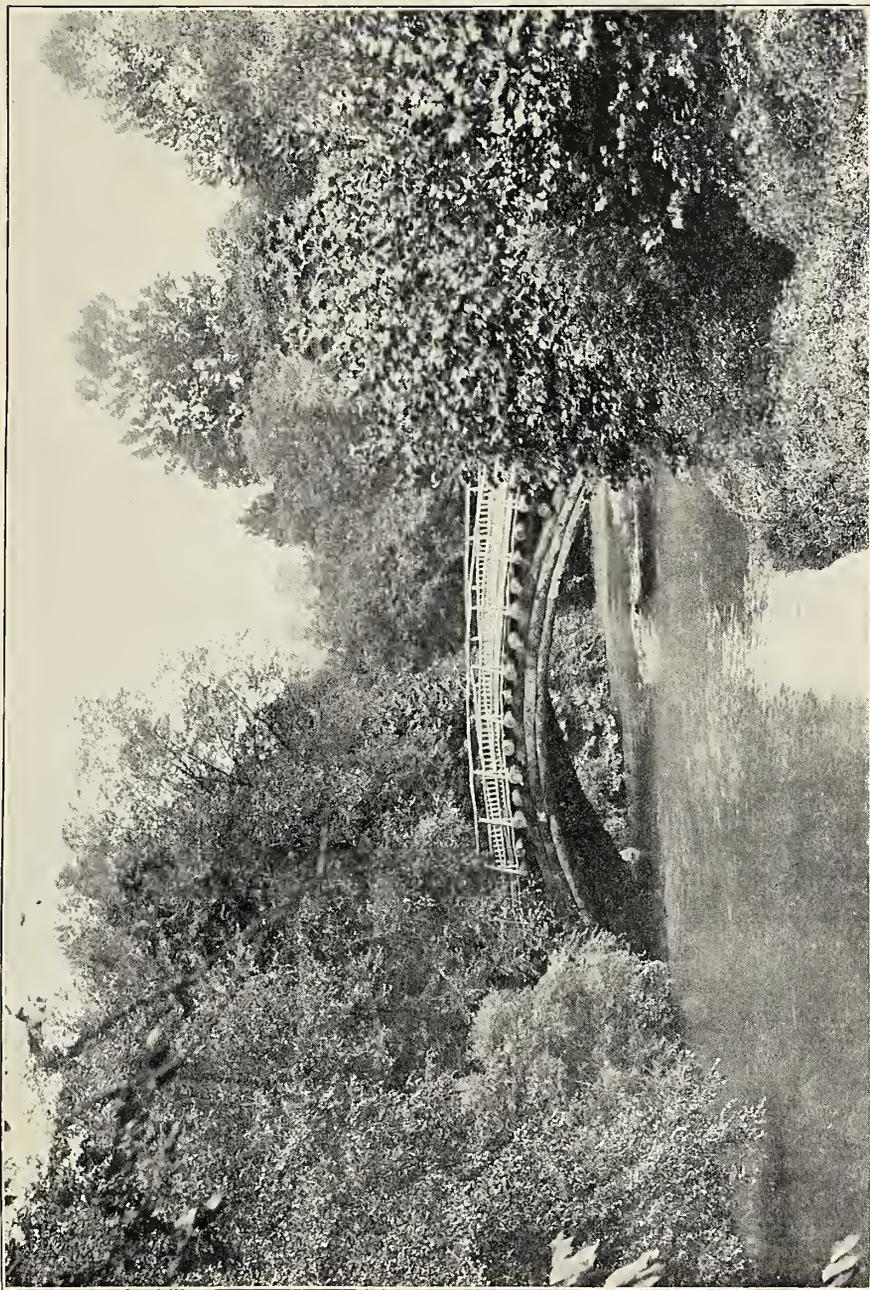
BEAVER DAM IN ZOOLOGICAL PARK.





SWAN'S NEST IN ZOOLOGICAL PARK.





BRIDGE IN NATIONAL ZOOLOGICAL PARK.





RUSTIC BRIDGE IN ZOOLOGICAL PARK.





BIRD'S-EYE VIEW OF NATIONAL ZOOLOGICAL PARK, FROM MODEL.



