

some time. The feeding of the collection has been ignored and evidently no attention given to what should be fed the various species of animals and birds.

I am suggesting various changes which must be

made in order to keep the stock in condition and free from disease.

The Buffaloes, now in a field together with the Elk and Zebras, should be separated from the other species and kept by themselves. These animals are at present badly fly-bitten and raw; something must be done for this condition, or the animals will die from the germs and destruction of skin: sheep-dip, animal-spray, or tar are excellent to keep the flies off the animals and give their hides a chance of improving.

The Elk should be kept in a separate corral.

The Zebras should be kept in a corral with the Brindled and White-tailed Gnu, the Springbok and Blesbok; these animals go in herds together in their native land, and so would do well together in captivity.

The Giant Elands will have to be given special care. These animals should be moved immediately to the location where the Giraffes used to be, and should be put together with the Beisa Oryx, and the White Oryx.

The Waterbok should be kept in a corral by themselves, and not mixed with other stock.

The Bison seem to be all right, and can be put anywhere on the ranch.

The Axis and Sambar Deer can also be placed anywhere on the place.

The Ibex and Barbary Sheep are all right where they are now.

The Elephant should have a large enclosure with a pool in which she can bathe.

The Water Buffalo can be put anywhere on the ranch; it would be best that these animals be kept by themselves.

The two Chimpanzees should be kept together in one big cage, and be given some apparatus, swings, etc., with which to amuse themselves; these intelligent apes must be made as contented as possible in captivity.

There are a great many bears at the ranch, and these animals should be moved from where they are at present to a bear-pit.

The arena where the Lions, Panthers, other cats, and Bears are kept is in poor condition: the animals are tearing up the floor, and I am afraid that soon they will have destroyed enough of the wood to enable them to escape. If Mr. Hearst wants to keep them where they are, he should have the inside of the cages repaired with iron-wood, and logs placed in each compartment so the animals can sharpen their claws on these instead of tearing up the building. All the iron bars, which at present are being destroyed by corrosion, should be scraped and painted before they rot to such an extent that it would be possible for the animals to break them.

yes,

The Polar Bears do not look well; they need a big pool in which to dive and swim. The place where they are now is not suitable for them: the pit would do well for lient but never for Polar-Bears.

The Rheas, Cassowaries, and Emus can be kept together in one enclosure.

It will be necessary that the Kangaroo infected with an incurable and infectious jaw disease, be killed. There is no way of curing this trouble, and unless the animal is killed the germ will spread and cause further loss among the stock.

Each corral should be equipped with a watertrough, cleaned and disinfected daily, and should have a shelter constructed where the stock can be kept at night and fed during the day. Hay-racks should be installed in each shelter so the food can be kept off the floor and not trampled underfoot by the animals. The corrals and shelters should be thoroughly cleaned daily, the sweepings and spores BURNED each day: by letting the spores lie about, thinly covered by hay, the germs breed rapidly and infect the whole herd which, you will realize, is a very dangerous situation.

A small hospital for sick animals is necessary so that the stock can be moved to this place for care; this will not only facilitate the recuperation of the individual animal, but will lessen the danger of the spread of any infectious disease to the rest of the species or to the entire collection.

A store-room should be built, equipped with frigidaire, in which to keep the food-supplies; there should also be a kitchen where the keepers may prepare the food for the various animals.

Feeding Instructions

Chopped garlic added to the meat once a week, and once a week they should be given cod-liver oil with the meat. One day a week they should not be given any meat, but fed milk and eggs only (about a quart to each animal). 'Santonin capsules placed on a piece of liver and given once a month will eliminate the danger of loss by round worms.

POLAR BEARS: Boiled carrots, onions, and sweet-potatoes, and boiled fish (4# to each animal) should be given three times a week; one day they are fed raw fish, and one day raw meat; one day a week they are given plain bread soaked with cod-liver oil.

OTHER BEARS: Once a week these animals are given meat. cooked with vegetables and chopped finely; the other days they are given all kinds of vegetables and fruits and bread. Twice a week they can be given cooked rice-and-raisins, to which a little sugar is added. Once wweek they should be given cod-liver oil on the bread.

Twice a week they should be given oats and alfalfa-hay, and once a week cod-liver oil mixed with bran. The rest of the week they can be given alfalfa-hay.

Alfalfa hay daily, with a dose of cod-liver oil if they are sick . These animals should be fed inside the shelter at all times.

OTHER HOOFED ANIMALS: Alfalfa hay daily, twice a week oats should be given, once a week chopped lettuce, carrots, and cabbage, and once a week bran dampened with cod-liver oil.

All Hoofed Animals should have a salt-and-sulphur lick in each corral.

CHIMPANZEES: Cooked food daily -- rice cooked with raisins, all kinds of cooked vegetables and fruits, raw or cooked. Raisin bread, brown bread; in the mornings they should be given hot coffee and milk, and twice a week warm milk and eggs.

Should be given onions and bread once a week, ELEPHANT: and once a week lettuce and cabbage. Every two weeks the Elephant's skin should be oiled.

OSTRICH, EMU, CASSOWARY, etc: Onions, lettuce, chopped vegetables, carrots, etc., three times a week; chopped bread and cod-liver oil once a week. The rest of the week they should be given Oats.

These suggestions for the care of the stock delieve, absolutely necessary if the animals are, I firmly believe, absolutely necessary if the animals and birds are to be kept in good condition. This is my opinion, and I believe it would be supported by any Zoological expert whom you might call in for suggestions.

I understand from Mr. Baldwin that there are at present only three men caring for the stock on the ranch; it is impossible for three men to care for the entire collection as it should be cared for, and do all the work that involves. You will have to have at least three more men for this purpose.

Wery truly yours,

cc Mr. Hearst Mr. Fleishhadker George Bistany To.