

NUTRITIONAL CHALLENGES ASSOCIATED WITH FEEDING A MULTISPECIES EXHIBIT: A SERIES OF CASE STUDIES

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Abstract

Feeding multi-species exhibits can be challenging in many ways. The first is ensuring that each species, as well as, each individual has access to a diet without excessive competition from another species. The second is ensuring that animals with different nutrient requirements are able to consume the appropriate diet. The third is to ensure that animals do not consume a diet which may be balanced for one species but predispose another to health problems.

The most practical solutions are including adequate feeding stations or stratifying feeding station based on exhibit niche.² Although stratification is effective, there have been suspected cases of nutrient toxicity in terrestrial animals that consumed food refused and dropped by the arboreal species in the exhibit.¹

More difficult scenarios occur when animals in an exhibit have access to all the diet, some of which may lead to health problems. Such examples include, psittacines that began to consume a meat or fish-based diet intended for piscivorous or carnivorous birds, attempts to hand feed selected birds and altering diet presentation and feeding times decreased the quantity of meat consumed by the psittacines. When the cause of death of a Grant's zebra (*Equus burchelli boehmi*) was associated with enterolithiasis, it was determined that the group of zebras was consuming the remaining alfalfa hay intended for the black rhinoceros (*Diceros bicornis*) in the exhibit. In the southwest United States, consumption of alfalfa hay is strongly associated with enterolith formation in domestic horses; therefore, the black rhinoceros diet was changed deleting the alfalfa hay from the diet. In other cases, animals have to be removed from the exhibit as a preventive health measure. While some nutritional challenges of a multi-species exhibit are easily corrected, others require creative techniques to ensure all the animals are receiving the balance diet intended for them.

LITERATURE CITED

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