A survey of the attitudes of stakeholders in the zoo industry towards the husbandry requirements of captive Great Apes

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Abstract

The attitudes of experts towards the husbandry of captive Great Apes was sought in order to gain a greater understanding of the potential importance of different features of the captive environment that may be critical in maintaining a high standard of welfare. Following initial consultation with the convener of the Primate Taxon Advisory Group of the Australasian Regional Association of Zoological Parks and Aquaria, 17 husbandry attributes, such as social structure of the group, enclosure size and staff qualifications, each with two to four levels (ie husbandry scenarios) of possible provision in an enclosure were identified and described. An online survey using Adaptive Conjoint Analysis was distributed internationally to relevant stakeholders: zoo management staff, keepers and education staff, research colony personnel, veterinarians, animal welfare organisation representatives and scientists. A total of 359 respondents completed the survey, and the average importance values for the attributes, and rank order of importance for each of their levels were calculated. Great Ape social structure, enclosure appearance, group size, avoidance provision and enclosure furnishings were considered the most important attributes of captive Great Ape husbandry, whereas feeding interval, staff qualifications, the inclusion of plants within the enclosure, enrichment rotation, and the amount of time an animal spent in an outdoor enclosure were considered of low importance. The order in which these issues were ranked was influenced by the Great Ape species, with physical attributes of the enclosure being rated as more important for orangutans (Pongo pygmaeus) and group social attributes more important for the other species. Stakeholder group had little influence on the ranking of issues. It is concluded that experts provided a consensus view on the importance of husbandry attributes of the different Great Ape species that can be used to evaluate their welfare.

Keywords: animal welfare, Great Ape, husbandry, stakeholder, survey, zoo

Introduction

For a captive zoo animal to experience a high level of welfare a variety of environmental and social needs must be met. Currently, husbandry standards for captive Great Apes are influenced primarily by minimum levels of resources advised by regional zoological associations, such as the Australasian Regional Association of Zoological Parks and Aquaria (ARAZPA) and the Association of Zoos and Aquariums (AZA) in their published guidelines and Animal Care Manuals. These are based generally on the opinion of stakeholders from affiliated institutions housing the species that were consulted during their preparation, rather than a systematic review of the importance of a variety of husbandry resources attributed by experts with different types of involvement with captive Great Apes. To assess the influence of different husbandry scenarios on Great Ape behaviour and welfare, a husbandry assessment is needed that can be used globally, with the objective of highlighting the aspects most important for captive Great Apes. Fraser (1995) asserts that an evaluation of the ‘most important’ factors affecting the ability of an individual to cope with its environment is essential in the assessment of its welfare; this has been done, for instance, in the Austrian livestock industry with the development of the ‘Animal Needs Index’ (Bartussek 1999). The first step towards making this type of assessment a reality is to determine what the most important husbandry factors are. This is achieved commonly by interviewing relevant stakeholders and reviewing the literature (Zubkowicz & Kaleta 2005), before comparing the findings with quantitative physiological values. We began this process for captive Great Apes by asking the opinions of relevant experts. Some studies have attempted to identify and list important physical or social aspects of the environment for captive Great Apes. Woolverton et al (1989) suggested that the key factors...