Identification of major welfare issues for captive elephant husbandry by stakeholders

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Abstract

Accurate identification of key welfare issues for captive elephants could improve standards and help in the development of a welfare index. In the absence of adequate scientific information on the relative importance of key issues, the views of a range of stakeholders were sought using adaptive conjoint analysis. Fifteen key welfare issues were identified by experts, and three to six Levels of each, representing common husbandry practices. In order of declining importance, 224 stakeholders rated the issues as enclosure substrate > group size > healthcare > enrichment > chaining > enclosure type > exercise provision > enclosure size > interaction with keeper > enclosure environment > keeper knowledge/experience > diet > contact method with keeper > display duration > enclosure security. Enclosure size was considered more important by scientists and keepers than zoo directors/managers and animal welfare organisation representatives. Animal welfare organisation representatives rated enclosure security higher than scientists. Keeper husbandry methods and ability of elephants to be active were two principal components in responses. Three principal groups of respondents were identified: scientists/veterinarians focusing more on conditions for the elephants and less on interaction with the public; keepers, focusing on keeper contact method, feeding and knowledge of elephants; and a group with mainly animal welfare organisation representatives/zoo directors focusing on enclosure security. It is concluded that there are some differences between stakeholders in their recognition of the most important welfare issues for elephants in zoos. However, recognising that a diversity of informed opinion is necessary to adequately devise welfare standards, an index of elephant welfare in zoos is proposed, based on the relative merits of different husbandry practices and the importance of the different issues.

Keywords: animal welfare, attitude, elephant, sanctuary, welfare index, zoo

Introduction

Elephants are one of the flagship species of zoos and being large, interesting animals are highly attractive to visitors and able to generate considerable revenue for the zoos that display them. Attending to their welfare represents perhaps the biggest challenge of any species, both from a husbandry and public perception perspective (Veasey 2006; p 63). Concerns regarding the declining population of captive elephants in American zoos have prompted the AZA’s Species Survival Plan (SSP) to include a statement that Asian and African elephants in North American zoos will be “demographically dead”, ie the captive population unsustainable, within the next few decades (Olson & Wiese 2000; Wiese 2000; Faust 2005; Faust et al 2006). Thus, zoos today face a challenging task in improving the captive husbandry and hence the welfare of their elephants from both an ethical and economic perspective (Clubb & Mason 2002).

Many people advocate that elephants do not belong in zoos, and zoos themselves acknowledge a need to improve elephant welfare and management in captivity (AZA 2001). Some of the greatest areas of concern include poor reproduction, inadequate facilities, lack of exercise and obesity, inappropriate animal numbers and social grouping, as well as health problems such as arthritis and disease (Taylor & Poole 1998; Clubb & Mason 2003). Improved husbandry, that implements high welfare breeding programmes and accreditation standards for captive elephants, with research directed towards solving specific husbandry challenges, is important for successful captive elephant management (Hutchins et al 2003; Hutchins 2006). Even though some captive elephant facilities have excellent programmes to achieve these goals most others are slow to implement these standards (Hutchins & Keele 2006).

There are many well developed welfare assessment systems that have been used for farm animals, of which the Animal Needs Index (ANI) developed by Bartussek (1999) is the most popular. Many of these indices are used in conjunction with the local animal welfare legislation to control welfare. The assessment systems are mainly based on environmental variables rather than animal-based measures (Bartussek 1999; Zaludík et al 2007), which has been criticised for lack of relevance to welfare (Sandøe et al 1997; Sundrum 1997;