

INTERNATIONAL JOURNAL
OF **H**HEALTH
& **A**ANIMAL SCIENCE
FFOOD SAFETY

CORRESPONDING AUTHOR

**Giovanni Quintavalle
Pastorino,**
giovanni.quintavalle@unimi.it



UNIVERSITÀ DEGLI STUDI DI MILANO
DIPARTIMENTO DI SCIENZE VETERINARIE
PER LA SALUTE, LA PRODUZIONE ANIMALE
E LA SICUREZZA ALIMENTARE



Factors influencing interactions in zoos: animal-keeper relationship, animal-public interactions and solitary animals groups

G. Quintavalle Pastorino^{1&2}, R. Preziosi³, M. Albertini¹

¹ Department of Veterinary Science and Public Health, Università degli Studi di Milano, Via Celoria 10, 20133 Milan, Italy,

² Zoological Society of London, Regent's Park, London NW1 4RY, United Kingdom,

³ Faculty of Life Sciences, The University of Manchester, Oxford Road, Manchester, United Kingdom

ABSTRACT

Interactions that animals experience can have a significant influence on their health and welfare. These interactions can occur between animals themselves, but also between animals and keepers, and animals and the public. Human and non-human animals come into contact with each other in a variety of settings, and wherever there is contact there is the opportunity for interaction to take place. Interaction with companion animals are well known, but human-animal interaction (HAR) (Hosey, 2008) also occurs in the context of farms (Hemsworth and Gonyou, 1997; Hemsworth, 2003), laboratories (Chang and Hart, 2002), zoos (Kreger and Mench, 1995) and even the wild (e.g. Cassini, 2001). This project proposes a permanent monitoring scheme to record animal-human interactions and animal-animal interactions in zoos. This will be accompanied by a survey of animal personality for welfare, husbandry, breeding programs and reintroduction purposes. The pilot project is currently based on direct monitoring of animal behaviour, use of time lapse cameras and animal personality questionnaires completed by experienced keepers. The goal of this project is to create a network between zoos to explore the aforementioned interactions to produce husbandry protocols and explore personality and behavioural traits in multiple species. We present provisional data regarding polar bear (Fasano Zoosafari, Italy), Sumatran tigers, Amur tigers and Asiatic lion (ZSL London and Whipsnade zoo) interactions with humans and conspecifics. This data is collected across a broad range of environmental conditions and outlines the monitoring protocols developed to collect this data.

The first year data show the great adaptability of these species to ex situ environments, low or absent negative impact of visitors' presence and the relevance of individual personality in these interactions.

REFERENCES

Hosey, G., 2008. *Applied Animal Behaviour Science* 109:105–127; Hemsworth, P.H., H.W. Gonyou. 1997. In: Appleby, M.C., Hughes, B.O. (Eds.), *Animal Welfare*. CAB International, Wallingford UK, pp. 205–217; Hemsworth, P.H., J.L. Barnett, G.J. Coleman. 1993. *Animal Welfare* 2:33–51; Chang, F.T., L.A. Hart. 2002. *ILAR Journal* 43:10–18; Kreger, M.D., J.A. Mench, 1995. *Anthrozoos* 8:143–158; Cassini, M.H. 2001. *Applied Animal Behaviour Science* 71:341–346.