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Visitor effects on zoo orangutans in two novel, naturalistic enclosures

Yuanting Choo^a, Peter Alan Todd^a and Daiqin Li^a   

^a Department of Biological Sciences, National University of Singapore, 14 Science Drive 4, Singapore 117543

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Abstract

Visitors are known to affect zoo animals, and such effects may be stressful, neutral, or enriching. The majority of research has focused on visitor number or visitor presence-absence, yet few studies have examined effects of other variables such as sound volume, visitor activity, and whether visitors interact with animals. In this study, the effects of visitor number, activity and proximity to animals were investigated on a group of captive orangutans in two treetop, 'free-ranging' exhibits at Singapore Zoo. Multinomial logistic regressions were used to elucidate the relationships between visitor and orangutan behaviours. Results from these analyses revealed a significant overall effect of the three visitor variables on orangutan behaviour. Interestingly, visitor number had little effect on the orangutans, except at one of the exhibits where the likelihood of food soliciting and looking at visitors increased when the number of people numbered more than 40. Visitor activity was generally not associated with any obvious signs of stress in the orangutans; visitors with food could even be a form of enrichment. However, visitors at close proximity decreased play behaviour and increased the chances of animals looking at the visitors. Enclosure design and habituation could have alleviated visitor effects for these two groups of orangutans. This study shows how investigation of a wider range of visitor variables may allow for more meaningful conclusions about the visitor effect, and that other factors such as enclosure design and habituation to visitors may also influence captive animal welfare.

Keywords: Visitors; Captive; Welfare; Orangutan; Behaviour

Article Outline

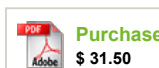
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Corresponding author. Tel.: +65 6516 4372; fax: +65 6779 2486.



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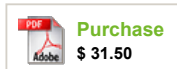


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