

## BEHAVIOURAL ECOLOGY OF LONG-TAILED MACAQUES IN THE CONTEXT OF URBAN COMMENSALISM: A COMPARISON STUDY BETWEEN BANGKOK (THAILAND) AND BALI (INDONESIA)

F. Brotcorne<sup>1,2</sup>, M-C. Huynen<sup>1</sup>, R. Beudels-Jamar<sup>2</sup>, T. Savini<sup>1,3</sup>, W. I. Nengah<sup>4</sup>, A. Fuentes<sup>5</sup>

<sup>1</sup>University of Liege, Behavioural Biology Unit, Liege, Belgium, <sup>2</sup>Royal Belgian Institute of Natural Sciences, Conservation Biology Unit, Belgium, <sup>3</sup>King Mongkut's University of Technology Thonburi, Conservation Ecology Group, Bangkok, Thailand, <sup>4</sup>Universitas Udayana, Primate Research Group, Bali, Indonesia,

<sup>5</sup>University of Notre Dame, Department of Anthropology, Indiana, USA

Presenter's Email: [fbrotcorne@ulg.ac.be](mailto:fbrotcorne@ulg.ac.be)

The quest for coexistence with non-human primates requires an extensive analysis of the growing commensalism phenomenon. The long-tailed macaque (*Macaca fascicularis*), a very successful commensal species, adapts remarkably to anthropogenic habitats. Studies in several Asian locations raised the issue of human-macaque conflict related to human health and safety as well as to conservation threats on macaques. Here, we aimed at assessing the anthropogenic impact (human presence and provisioning frequency) on the eco-behavioural profile of two populations living commensally with humans in Bangkok (Thailand) and Ubud (Padangtegal, Bali). We used an identical focal and scan sampling methodology during two three-month study periods in 2007 (Bangkok) and 2009 (Bali). Despite different ecological conditions, the two populations showed a strongly similar activity budget. Resting was the most common activity (40% vs. 35%), followed by feeding (28% vs. 24%), moving (15% vs. 14%) and affiliations (14% vs. 19%). Agonistic behaviours were slightly more frequent in Bali (0.6% vs. 3.0%), maybe due to higher population density (8.5/ha vs. 14.2/ha). Contrary to previous studies, we did not find any impact of provisioning on agonistic interactions. Concerning diet composition, proportions of natural vs. provisioned food and proportions of various food categories were consistent between the two sites. Since the ecological conditions were different, the anthropogenic factors are likely to explain the strong consistency in eco-behavioural profile of the two populations. Further studies are planned on three other populations to assess the specific impact of commensalism on behavioural ecology and derive the implications for long term population trends.

Keywords: commensalism, behavioural ecology, Southeast Asia, *Macaca fascicularis*