

GAJAH

NUMBER 44
2016

Journal of the Asian Elephant Specialist Group



GAJAH

Journal of the Asian Elephant Specialist Group Number 44 (2016)

The journal is intended as a medium of communication on issues that concern the management and conservation of Asian elephants (*Elephas maximus*) both in the wild and in captivity. It is a means by which members of the AsESG and others can communicate their experiences, ideas and perceptions freely, so that the conservation of Asian elephants can benefit. All articles published in *Gajah* reflect the individual views of the authors and not necessarily that of the editorial board or the AsESG. The copyright of each article remains with the author(s).

Editor

Dr. Jennifer Pastorini

Centre for Conservation and Research
26/7 C2 Road, Kodigahawewa
Julpallama, Tissamaharama
Sri Lanka
e-mail: jenny@aim.uzh.ch

Editorial Board

Dr. Ahimsa Campos-Arceiz

School of Geography
University of Nottingham Malaysia Campus
Jalan Broga, 43500 Semenyih, Kajang, Selangor
Malaysia
e-mail: ahimsa@camposarceiz.com

Heidi Riddle

Riddles Elephant & Wildlife Sanctuary
P.O. Box 715
Greenbrier, Arkansas 72058
USA
e-mail: gajah@windstream.net

Dr. T. N. C. Vidya

Evolutionary and Organismal Biology Unit
Jawaharlal Nehru Centre for
Advanced Scientific Research
Bengaluru - 560064
India
e-mail: tncvidya@jncasr.ac.in

Dr. Prithiviraj Fernando

Centre for Conservation and Research
26/7 C2 Road, Kodigahawewa
Julpallama, Tissamaharama
Sri Lanka
e-mail: pruthu62@gmail.com

Dr. Alex Rübel

Direktor Zoo Zürich
Zürichbergstrasse 221
CH - 8044 Zürich
Switzerland
e-mail: alex.ruebel@zoo.ch

GAJAH

Journal of the Asian Elephant Specialist Group
Number 44 (2016)

This publication was proudly funded by
Wildlife Reserves Singapore



Editorial Note

Gajah will be published as both a hard copy and an on-line version accessible from the AsESG web site (www.asesg.org/gajah.htm). If you would like to be informed when a new issue comes out, please provide your e-mail address. If you need to have a hardcopy, please send a request with your name and postal address by e-mail to <jenny@aim.uzh.ch>.

Copyright Notice

Gajah is an open access journal distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

<http://creativecommons.org/licenses/by/4.0/>

Cover

Tusker at Nagarhole National Park (India)

Photo by T. N. C. Vidya

(See article on page 5)

Layout and formatting by Dr. Jennifer Pastorini

Printed at P & G Printers, Colombo 10, Sri Lanka

Instructions for Contributors

Gajah welcomes articles related to Asian elephants, including their conservation, management, and research, and those of general interest such as cultural or religious associations. Manuscripts may present research findings, opinions, commentaries, anecdotal accounts, reviews etc. but should not be mainly promotional.

All articles will be reviewed by the editorial board of *Gajah*. *Gajah* also has a peer reviewed section. Peer reviewed papers will carry a notation to that effect. Authors are requested to specify that they are submitting their paper to the “**peer reviewed section**“. Word limits for submitted articles are for the entire article (title, authors, abstract, text, tables, figure legends, acknowledgements and references).

Correspondence: Readers are encouraged to submit comments, opinions and criticisms of articles published in *Gajah*. Such correspondence should be a maximum of 500 words, and will be edited and published at the discretion of the editorial board.

News and Briefs: Manuscripts on anecdotal accounts and commentaries on any aspect of Asian elephants, information about organizations, and workshop or symposium reports with a maximum of 1000 words are accepted for the “**News and Briefs**” section.

Research papers: Manuscripts reporting original research with a maximum of 5000 words are accepted for the “**Research Article**” section. They should also include an abstract (100 words max.). Shorter manuscripts (2000 words max.) will be published as a “**Short Communication**” (no abstract).

Tables and figures should be kept to a minimum. Legends should be typed separately (not incorporated into the figure). Figures and tables should be numbered consecutively and referred to in the text as (Fig. 2) and (Table 4). The lettering on figures must be large enough to be legible after reduction to final print size. Include tables and line drawings in the MS WORD document you submit. In addition, all figures must be provided as separate files in JPEG or TIFF format.

References should be indicated in the text by the surnames(s) of the author(s) with the year of publication as in this example: (Baskaran & Desai 1996; Rajapaksha *et al.* 2004)

Avoid if possible, citing references which are hard to access (e.g. reports, unpublished theses). Format citations in the ‘References’ section as in the following examples, writing out journal titles in full.

Baskaran N & Desai AA (1996) Ranging behavior of the Asian elephant (*Elephas maximus*) in the Nilgiri biosphere reserve, South India. *Gajah* **15**: 41-57.

Olivier RCD (1978) *On the Ecology of the Asian Elephant*. Ph.D. thesis, University of Cambridge, Cambridge, UK.

Rajapaksha RC, Mendis GUSP & Wijesinghe CG (2004) Management of Pinnawela elephants in musth period. In: *Endangered Elephants, Past Present and Future*. Jayewardene J (ed) Biodiversity & Elephant Conservation Trust, Colombo, Sri Lanka. pp 182-183.

Sukumar R (1989) *The Asian Elephant: Ecology and Management*. Cambridge University Press, Cambridge, UK.

Manuscripts should be submitted by e-mail to the editor <jenny@aim.uzh.ch>. Submission of an article to *Gajah* is taken to indicate that ethical standards of scientific publication have been followed, including obtaining concurrence of all co-authors. Authors are encouraged to read an article such as: Benos *et al.* (2005) Ethics and scientific publication. *Advances in Physiology Education* **29**: 59-74.

Contents

Gajah 44 (2016)

Editorial	1
Notes from the Chair IUCN SSC Asian Elephant Specialist Group	2-3
Letter of Apology	4

Research Article - Peer-reviewed

Short-term variation in sex ratio estimates of Asian elephants due to space use differences between the sexes	5-15
<i>Manan Gupta, Shruthi Ravindranath, Deepika Prasad & T. N. C. Vidya</i>	

Research Articles

A qualitative analysis of the main threats to Asian elephant conservation	16-22
<i>Lee Ee Ling, Mariani Ariffin & Latifah Abd Manaf</i>	
Diet component estimation in Asian elephants by microhistological faecal analysis	23-29
<i>P. Ferando, L. K. A. Jayasinghe, R. A. R. Perera, V. Weeratunga, S. W. Kotagama & J. Pastorini</i>	

Short Communications

Can a wild Asian elephant change its interaction patterns with humans?	30-32
<i>Jean-Philippe Puyravaud, Shanti Puyravaud & Priya Davidar</i>	
Human-elephant conflict in Baripada Forest Division, Odisha, India	33-35
<i>Nimain C. Palei, & L. A. K. Singh</i>	
Surgical treatment of a cervico-vaginal prolapse in an elephant in Myanmar	36-39
<i>Zaw Min Oo et al.</i>	
Morphology and prevalence of the louse <i>Haematomyzus elephantis</i> in captive Asian elephants in Sri Lanka	40-42
<i>H. V. Waruna Suranga, Ashoka Dangolla, Chandana Rajapakshe & R. P. V. Jayantha Rajapakse</i>	
Tibiofibular fracture and its management in an Asian elephant calf	43-45
<i>Jayakrushna Das, Sidhartha Sankar Behera & Niranjan Sahoo</i>	
Direct application of magnesium sulphate in treating foot and nail abscesses in Asian elephants	46-47
<i>Rinku Gohain</i>	

News and Briefs

Elephant Conservation Group (ECG) workshop report	48-49
Recent publications on Asian elephants	50-67
News briefs	68-77
Asian Elephant Specialist Group Convention	78