IUCN

The World Conservation Union



Editor

Helen van Houten

Associate Editor

Dali Mwagore

Editorial Board

Julian Blanc Holly Dublin Julian Fennessy Esmond Martin Robert Olivier Nico van Strien Lucy Vigne

Design and layoutDamary Odanga

Graphics

Phillip Miyare

Nairobi, Kenya

Address all correspondence, including enquiries about subscription, to
The Editor, *Pachyderm*PO Box 68200 – 00200

tel: +254 20 890605–12 fax: +254 20 890615 email: afesg@iucn.org website: www.iucn.org/afesg

Reproduction of this publicaton for educational or other non-commercial purposes is authorized without written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without written permission of the copyright holder.

Pachyderm

journal of the African Elephant, African Rhino and Asian Rhino Specialist Groups

July - December 2007

No. 43

1 Chair reports / Rapports des Présidents

- 1 African Elephant Specialist Group report / Rapport du Groupe Spécialiste des Eléphants d'Afrique Holly T. Dublin
- 10 African Rhino Specialist Group report / Rapport du Groupe Spécialiste des Rhinos d'Afrique Martin Brooks
- 16 Asian Rhino Specialist Group report / Rapport du Groupe Spécialiste des Rhinos d'Asie Nico van Strien, Bibhab Kumar Talukdar
- 19 Research
- 19 Probable extinction of the western black rhino, Diceros bicornis longipes: 2006 survey in northern Cameroon Isabelle Lagrot, Jean-François Lagrot, Paul Bour
- 29 Application of ArcView Animal Movement Analysis Extension as a tool for monitoring elephant movement: preliminary results from northern Cameroon
 - Désiré Foguekem, Martin Ngankam Tchamba, Mark Macallister, Pierre Ngassam, Mike Loomis
- 36 Elephant movement in W Regional Park, western Africa
 - Audrey Ipavec, Daniel Maillard, Philippe Chardonnet, Camille Danes, Mamoudou Wally, Moussa Lompo, Dominique Dulieu
- Forest elephant dung decay in Ndoki Forest, northern Congo
 - Thomas Breuer, Mireille Ndoundou Hockemba
- 52 Preliminary survey of forest elephant crossings in Sangha Trinational Park, central Africa

 Karen Weinbaum, Zacharie Nzooh, Leonard
 Usongo, Melinda Laituri

Cover: A Yemeni man proudly wears his dagger with its priceless rhino horn handle. Photo: Lucy Vigne

Pachyderm

July - Decemder 2007

No. 43

journal of the African Elephant, African Rhino and Asian Rhino Specialist Groups

63	Determining minimum population size and demographics of black rhinos in the Salient of Aberdare National Park, Kenya
	Felix Patton, Martin Jones
73	Increased demand for rhino horn in Yemen threatens eastern Africa's rhinos
	Lucy Vigne, Esmond Martin, Benson Okita-Ouma
87	Management
87	Establishing a monitoring system for black rhinos in the Solio Game Reserve, central Kenya
	Felix Patton, Petra Campbell, Edward Parfet
96	Illegal killing of African rhinos and horn trade, 2000–2005 Simon A.H. Milledge
108	Field note
108	Dhikala grasslands in Corbett Tiger Reserve
	A.J.T. Johnsingh, K. Ramesh, Qamar Qureshi
111	History
111	Black rhino, white rhino: what's in a name? Jim Feely
116	Rhino notes
116	Update on the Black Rhino Range Expansion Project
	Pamela Sherriffs
117	Conservation strategy for black rhinos and management guidelines for white rhinos launched in Kenya
	Benson Okita-Ouma, Patrick Omondi
120	Book review
120	Historical mammal incidence in the Cape Province, vol. 2, by C.J. Skead
	Kees Rookmaaker
121	Letter

Views expressed in *Pachyderm* are those of the individual authors and do not necessarily reflect those of IUCN, the Species Survival Commission or any of the three Specialist Groups responsible for producing *Pachyderm* (the African Elephant Specialist Group, the African Rhino Specialist Group and the Asian Rhino Specialist Group).

Guidelines for contributors

122

Acknowledgements

The production of this issue of *Pachyderm* was only possible through contributions from a number of organizations and individuals. In particular, we would like to thank the following:







We also thank the following people who have reviewed articles for *Pachyderm*. The names are arranged in alphabetical order.

John Hanks

Simon Hedges

Richard Hoare

Hugo Jachmann

Nigel Hunter

Peter Jackson

Kes Hillman Smith

Bernard Hien

John Hart

Keryn Adcock Patrick Adjewodah Fred Bagley Dave Balfour Richard Barnes Stephen Blake Julian Blanc Ben Bokhout Philippe Bouché Steve Broad Bob Burn Ken Burnham Guy Castley Bertrand Chardonnet Philippe Chardonnet

Colin Craig Fred de Boer Eric Dinerstein Raoul du Toit Richard Emslie R.A. Fayrer-Hosken Frauke Fischer Jacques Flamand Charles Foley Thomas Foose

Tim Jackson Reuben Johnson Samuel M. Kasiki Winnie Kiiru Michael Kock Richard Kock Anwaruddin Choudhury Moses Kofi Sam Sally Lahm Andre Lambert Marc Languy P.C. Lee Keith Leggett Keith Lindsay Moses Litoroh Sebastien Luhunu Fiona Maisels Esmond Martin Herve Fritz John Mason Marion Garai Barbara McKnight Julie Garnier Tom Milliken Nicholas Georgiadis Antoni Milewski Debbie Gibson Max Morgan-Davis Robert Guldemond Leonard Mubalama Anthony Hall-Martin Aimé Nianogo

Tomo Nishihara Paul Noupa Joseph Ogutu Ben Okita-Ouma Rob Olivier Patrick Omondi Ferrel V. Osborne Soulemane Ouattara

Guv Parker Ian Parker Hubert Planton **Hugo Rainey** Rosalind Reeve Al Roca

Kees Rookmaaker Robin Sharp Claude Sikubwabo Rob Slotow **Daniel Stiles** Nico van Strien

Bibhab Kumar Talukdar

Russell Taylor Martin Tchamba Aristide Tehou Chris Thouless Andrea Turkalo Rudi van Aarde Lucy Vigne Matt Walpole Noah Sitati Wasilwa

Ian Whyte

URGENT APPEAL

Dear Pachyderm readers,

Since 1983 *Pachyderm* has served as an excellent platform for disseminating information and sharing lessons learned from conservation of African elephants and African and Asian rhinos. However, it is perhaps a sign of the times that we are now finding it increasingly hard to raise the approximately USD 50,000 per year we need to produce and disseminate this journal in hard copy and free of charge to our readership. In fact, it is only because of the support of WWF International, the US Fish and Wildlife Service, the Santa Barbara Zoo and a private donation from an anonymous benefactor that we have been able to produce the present issue. Despite our greatest efforts, we have not yet managed to secure adequate funds for producing *Pachyderm* 44 or beyond. This means that we again must now seriously start considering all options to make production and dissemination of this journal more sustainable in the long term, including approaching a commercial publisher or shifting to a purely electronic format. However, the latter is clearly not a completely satisfactory solution, especially because many of our African readers still do not have reliable Internet access.

In light of this, we are turning to you, the readership, for suggestions as to any possible funding sources that we might be able to access to ensure the continued production of this journal in its present form. Any donation of USD 100 or more we will acknowledge in future issues. Any additional support, ideas, suggestions or other relevant information should be sent to Julian Fennessy, Programme Officer, IUCN SSC African Elephant Specialist Group, email; Julian.Fennessy@iucn.org; tel: +254 (0)20 890605–12; fax: +254 (20) 890615.

Yours sincerely,

Dr Holly T. Dublin, Chair IUCN/SSC African Elephant Specialist Group

Dr Martin Brooks, Chair IUCN/SSC African Rhino Specialist Group

Dr Nico van Strien, Co-chair Dr Bibhab Kumar Talukdar, Co-chair IUCN/SSC Asian Rhino Specialist Group

Hard copies of this and selected back issues of *Pachyderm* can be purchased through the African Elephant Specialist Group's online store. Please visit www.iucn.org/afesg/pachy. Major credit cards accepted.