## The status of vulnerable gaur bos gaurus and endangered banteng bos javanicus in ea so nature reserve and yok don and cat tien national parks, Vietnam

## Nguyen M.H.

Centre for Natural Resources and Environmental Studies, Vietnam National University, 19 Le Thanh Tong Street, Hanoi, Viet Nam

Abstract: The wild buffaloes, gaur Bos gaurus and banteng Bos javanicus, are among the most threatened mammals in Vietnam but little information is available on their status and distribution. Over 20042007 I undertook surveys in three Vietnamese distribution strongholds of the Vulnerable gaur and Endangered banteng: Ea So Nature Reserve and Yok Don and Cat Tien National Parks. A total of 22 herds with 121 gaur and seven herds with 49 banteng were observed. Herd sizes of both species were generally lower than those recorded in Thailand and Malaysia. Most of the herds were observed in remote areas, showing that the species are probably staying away from areas with human activity. No banteng were found in Cat Tien National Park. Of the other wild buffalo species the Critically Endangered kouprey Bos sauveli and Endangered water buffalo Bubalus arnee were not observed in the three protected areas but the Near Threatened serow Capricornis milneedwardsii was occasionally observed in all three areas. Illegal hunting, habitat degradation and disturbance appear to be the most significant threats to gaur and banteng in the areas surveyed. It is essential to have effective law enforcement to eliminate human impacts on these two species, and an adequate conservation strategy to secure their long-term survival. © Fauna & Flora International 2009.

Author Keywords: Banteng; Bos gaurus; Bos javanicus; Gaur; Herd size; Hunting; Trophy; Vietnam; Wild buffalo

Index Keywords: anthropogenic effect; conservation planning; endangered species; habitat conservation; human activity; hunting; mammal; national park; nature reserve; population distribution; protected area; survivorship; Asia; Eurasia; Southeast Asia; Viet Nam; Bos gaurus; Bos javanicus; Bos sauveli; Bubalus; Bubalus bubalis; Capricornis; Mammalia; Naemorhedus sumatraensis

Year: 2009

Source title: ORYX

Volume: 43

Issue: 1

Page: 129-135

Cited by: 1

Link: Scorpus Link

Correspondence Address: Nguyen, M. H.; Centre for Natural Resources and Environmental Studies, Vietnam National University, 19 Le Thanh Tong Street, Hanoi, Viet Nam; email: ha.nguyenba@gmail.com

ISSN: 306053 CODEN: ORYXA DOI: 10.1017/S0030605307000440

Language of Original Document: English

Abbreviated Source Title: ORYX

Document Type: Article

Source: Scopus

Authors with affiliations:

• Nguyen, M.H., Centre for Natural Resources and Environmental Studies, Vietnam National University, 19 Le Thanh Tong Street, Hanoi, Viet Nam

## References:

- Anon, (1997) Proposal for Support for Cat Tien National Park and Cat Loc Rhinoceros Reserve, , Ministry of Agriculture and Rural Development, Hanoi, Vietnam
- Anon, (1998) The Investment Project to Expand the Yokdon National Park, Forest Inventory and Planning Institute, Hanoi
- Vietnam. Anon.(1998b) Investment Plan for Ea So Nature Reserve. Tay Nguyen University, Buon Ma Thuot, Vietnam(2003)
  Conservation Management and Operational Plan for Cat Tien National Park, Dong Nai, Lam Dong and Binh Phuoc Provinces,
  Vietnam: 2003-2008, CAT TIEN NATIONAL PARK, Cat Tien National Park, Dong Nai, Vietnam
- CHOUDHURY, A., Distribution and conservation of thegaur Bos gaurus in the Indian subcontinent (2002) Mammal Review, 32, pp. 199-226
- CORBET, G.B., HILL, J.E., (1992) The Mammals of the Indomalayan Region: A Systematic Review, , Oxford University Press, Oxford, UK
- COX, R., HA, D.D., Survey for Kouprey in the Yok Don Nature Reserve, Dak Lak Province, Vietnam (1990) Unpublished Report Kouprey Conservation Trust, , Hanoi, Vietnam
- DANG, H.H., (1986) Biology and Ecology of Ungulates in Vietnam, , Science and Technique, Hanoi, Vietnam
- DANG, H.H., TRAN, A.T., Preliminary results of estimating population of banteng (Bos javanicus) in dry dipterocarp forest in Yok Don, Dak Lak province (1991) Journal of Biology, 13, pp. 30-36
- DUCKWORTH, J.W., HEDGES, S., (1998) Tracking Tigers: A Review of the Status of Tiger, Asian Elephant, Gaur, and Banteng in Vietnam, Lao, Cambodia, and Yunnan (China), with Recommendations for Future Conservation Action, WWF-Indochina Programme, Hanoi, Vietnam
- (2006) Decree No. 32/2006/ND-CP on Management of Endangered Species of Wild Fauna and Flora, , GOVERNMENT OF VIETNAM , Vietnamese Government, Hanoi, Vietnam
- HAYES, B., (2004) Wild Cattle Survey of Cat Tien National Park, Vietnam, , Technical Report No. 47. WWF-Cat Tien National Park Conservation Project, Dong Nai, Vietnam
- HEINEN, J.T., SRIKOSAMATARA, S., Status and protection of Asian wild cattle and buffalo (1995) Conservation Biology, 10, pp. 931-934
- (2007) 2007 IUCN Red List of Threatened Species, , Http://www.iucnredlist.org, IUCN, Gland, Switzerland, accessed 9 April 2008
- LAURIE, A., HA, D.D., PHAM, T.A., (1989) Survey for Kouprey (Bos sauveli) in Western Dac Lac Province, Vietnam, , Unpublished Report. The Kouprey Conservation Trust, Hanoi, Vietnam
- LE, X.C., PHAM, T.A., DUCKWORTH, J.W., VU, N.T., VUTHY, L., (1997) Report on Large Mammal Survey in Dak Lak Province, Vietnam, , WWF Vietnam/IUCN Vietnam, Hanoi, Vietnam
- LING, S., (2000) A Survey of Wild Cattle and Other Mammals, Cat Tien National Park, Vietnam, , Technical Report No. 14. WWF-Cat Tien National Park Conservation Project, Dong Nai, Vietnam

- (2007) RedData Book of Vietnam: Part 1. Animals, , MINISTRY OF SCIENCE AND TECHNOLOGY , Scientific and Technique, Hanoi, Vietnam
- MURPHY, D., (2004) The Status and Conservation of Javan Rhinoceros, Siamese Crocodile, Phasianidae and Gaur in Cat Tien National Park, Vietnam, , Technical Report No. 50. WWF-Cat Tien National Park Conservation Project, Dong Nai, Vietnam
- MURPHY,D. & PHAN, D.T. (2002) Mammal Observations in Cat Tien National Park, Vietnam, 2002. Technical Report No.
  43.WWF-Cat Tien National Park Conservation Project, Dong Nai, VietnamMCKINNON, J.R., STUART, S.N., (1998) The Kouprey: An Action Plan for its Conservation, JuCN/SSC Asian Wild Cattle Specialist Group, Gland, Switzerland
- NGUYEN, M.H., (2006) Status and Distribution of Gaur (Bos gaurus) in Cat Tien National Park, , Unpublished Report. CRES, National University, Hanoi, Vietnam
- NGUYEN, M.H. (2006b) Status and Distribution of Gaur (Bos gaurus) and Banteng (Bos javanicus) in Ea So Nature Reserve, Dak Lac Province. Unpublished Report. CRES, National University, Hanoi, VietnamNGUYEN, M.H., NGUYEN, H.H., Results of wild cattle (Bos spp.) survey in Binh Phuoc province (2005) Journal of Biology, 27, pp. 60-62
- NGUYEN, M.H., NGUYEN, Q.T., Assessment of the status of hunting and trade in wildlife in Drang Phok village, Krong Ana communue, Buon Don district, Dak Lak province (2004) Proceedings of Scientific Workshop on Natural Resources and Environment 2003-2004, pp. 63-69., eds Q.H. Truong & B.Q. Pham, pp, Science and Technique, Hanoi, Vietnam
- POLET, G., LING, S., Protecting mammal diversity: Opportunities and constraints for pragmatic conservation management in Cat Tien National Park, Vietnam (2004) Oryx, 38, pp. 1-11
- PRAYURASIDDHI,T.(1997) The ecological separation of gaur (Bos gaurus) and banteng (Bos javanicus) in Huai Kha Khaeng Sanctuary, Thailand. PhD thesis, University of Minnesota, Twin, USATHACH, M.H., NGUYEN, M.H., Survey on wild bovines (Bovidae spp.) in Bu Gia Map National Park (Binh Phuoc province) and Nam Nung Nature Reserve (Dak Nong province) (2005) Journal of Science, 29, pp. 103-107
- (2004) Sourcebook of Existing and Proposed Protected Areas in Vietnam, , TORDOFF, A.W, TRAN, Q.B, NGUYEN, D.T. & LE, M.H, eds, BirdLife International in Indochina, Hanoi, Vietnam
- WHARTON, C.H., (1957) An Ecological Study of the Kouprey, Novibos sauveli (Urbain), , Institute of Science and Technology, Manila, The Philippines
- ZAINUDDIN, Z.Z. (2005) The Conservation of Malayan Gaur (Bos gaurus hubbacki) in Malaysia. Department of Wildlife and National Parks, Kuala Lumpur, Malaysia

Download: 0394.pdf