

He is critical of attempts to assess the number of leopards in sub-Saharan Africa, challenging assumptions and methods used, and concluding that countrywide and continentwide estimates must be viewed with continued skepticism. He considers Myers' 1976 estimates more reliable than the computerized estimates of Martin and de Meulenaer in 1988.

To conserve leopards, Bailey proposes three main approaches: environmental education and awareness, primarily for school-children; protected areas; and sustainable utilization of leopards, including trophy hunting, for the benefit of local people.

While believing that the leopard has more chance of survival than any other large solitary felid, Bailey's final sentences reflect a near forlorn hope in the light of human population growth, social unrest, increasing severity of droughts and global climatic changes.

Peter Jackson

Cheetahs of the Serengeti Plains

by Tim Caro

Chicago University Press, Chicago, USA

ISBN 0-226-09433-2 (cloth) -0 (paper). 478 pp.

Caro states the aim of his book in the very first sentence: to explore the evolutionary causes of social behavior. He finds the cheetah particularly interesting because of the great variation in its social organization: three separate age-sex classes may live either alone or in groups, and this allows hypotheses about group living to be tested "without the confounding effects of phylogeny. At the same time he seeks to provide baseline data on cheetah ecology and behaviour in the Serengeti which could be useful for captive breeding and re-introductions.

The book ranges over cheetah grouping and cooperative hunting; female reproduction and cub mortality; costs of family life for mothers and benefits of family life for cubs; hunting and grouping in adolescence; mating system, territoriality and male group size; foraging success and cooperative hunting in male groups; and behaviour of males in coalitions, concluding with chapters on the evolution and ecology of cheetahs and conservation of cheetahs in the wild and in captivity. Each chapter ends with a useful summary.

Caro attributes poor breeding results in captivity to environmental and social impediments rather than the widely-publicized genetic depauperization of the cheetah as a result of population bottleneck 6,000-20,000 years ago. But he warns that there is theoretical and empirical support for the thesis that there is reduced ability to combat infectious disease, and says that this should be taken more seriously by captive breeders and park managers.

He notes that reintroductions of cheetahs have been extremely successful in areas without lions or spotted hyenas and there has been rapid population growth.

After this *tour de force*, Caro warns would-be successors that the most important thing is conservation of the cheetah in the wild, not further studies of ecology and behaviour, about which more is known of the cheetah than about most endangered species.

"My advice is to get involved in reintroduction programmes or ecological monitoring or enter the world of conservation politics, especially at the local level, rather than fiddling while Rome burns."

He concludes: "The cheetah's survival principally depends on maintaining viable populations in both protected areas and in multiple-use areas in the wild, with captive breeding programs being only a stopgap measure. We need the commitment of national authorities, local people, and conservation organizations to secure its long-term survival."

Peter Jackson

Neotropical Cats: Ecology and Conservation

by Tadeu Gomes de Oliveira

Universidade Federal do Maranhao (EDUFMA), Sao Luis, Brazil
ISBN 85-85048-01-8. 244 pp.

Oliveira's book is a compilation of the information available on the 10 cat species found in the Neo-tropics, hitherto scattered in many publications. This valuable reference book grew from a paper presented for a graduate course at the University of Florida. Full page maps and tables accompany each species account, which covers distribution, life history, ecology (habitat, home range and activity patterns), and feeding ecology. There are colour photos of all 13 species.

The species accounts are followed by chapters on interspecific relations, skin trade, and status, conservation and perspectives, with appendices on items found in diets, body measurements, common and commercial names and scientific synonyms, and a tentative assessment of the status of the neotropical cats at sub-species level based on recommendations to IUCN by Mace and Landé. There is a list 234 references to literature cited in the text.

Oliveira points out that systematic field work has been carried out on only six of the 10 species occurring in the Neo-tropics, with most available information being on jaguar and ocelot. There is obviously a great need for studies of all the cats, especially of the Andean mountain cat and the kodkod, about which very little is known.

Peter Jackson