LOLLDAIGA HILLS RESEARCH PROGRAMME

NEWSLETTER

Tom Butynski & Yvonne de Jong

March 2017 (Issue 11)
New to lolldaiga.com

- News: Lolldaiga Hills Ranch Bird List reaches 382 species
- New article: Historic and current distribution, abundance, and habitats of Roosevelt’s sable antelope *Hippotragus niger roosevelti* (Heller, 1910) (Cerartiodactyla: Bovidae) in Kenya
- New article: Distribution of mitochondrial clades and morphotypes of baboons *Papio* spp. (Primates: Cercopithecidae) in eastern Africa

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News

Lolldaiga Hills Ranch Bird List reaches 382 species
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Eleven species have been added to the Lolldaiga Hills Ranch Bird List since July 2016.

Here are the 11 species:

- *Mesophoyx intermedia* Yellow-billed egret
- *Hieraaetus pennatus* Booted eagle
- *Chlidonias leucopterus* White-winged tern
- *Otus scops* Eurasian scops owl
- *Otus leucotis* White-faced scops owl
- *Merops persicus* Blue-cheeked bee-eater
- *Merops nubicus* Northern carmine bee-eater
- *Merops albicollis* White-throated bee-eater
- *Tmetothylacus tenellus* Golden pipit
- *Lanius senator* Woodchat shrike
- *Bubalornis niger* Red-billed buffalo-weaver

The records for Eurasian scops owl (based on views and digital recordings) and woodchat shrike (based on photographs) are particularly interesting as these two species have been seldom reported for Kenya.

The revised bird list can be viewed and downloaded at: [http://www.lolldaiga.com/biodiversity-research/biodiversity/species-list/](http://www.lolldaiga.com/biodiversity-research/biodiversity/species-list/)

New Publications

**Historic and current distribution, abundance, and habitats of Roosevelt’s sable antelope Hippotragus niger roosevelti (Heller, 1910) (Cerartiodactyla: Bovidae) in Kenya**

Tom Butynski, Ian Parker & Yvonne de Jong

**ABSTRACT**

Roosevelt’s sable *Hippotragus niger roosevelti* is one of Kenya’s most distinctive and threatened large mammals. Historically, sable herds occurred in the vicinity of Taveta, and in the miombo and *Diospyros* woodlands of the coastal hinterland from the Tanzania-Kenya border northward for at least 210 km. Most of the historic distribution of sable in Kenya lies 15–35 km inland from the coast at 100–200 m altitude where mean annual rainfall is 800–1200 mm. In terms of numbers, however, most sable occurred in the higher and wetter Shimba Hills (150–460 m; mean annual rainfall 1000–1200 mm). Bachelor males sometimes moved >150 km inland. Much of the decline of the distribution and size of Kenya’s sable population occurred during 1950–1980. Sable in Kenya not reported outside of Shimba Hills National Reserve after 1994. Geographic distribution of sable herds in Kenya declined from roughly 5000 km² in 1884 to 70 km² today (>98% decline in 132 years). The number of sable in Kenya was already small as of 1884, when there were probably <400 individuals. Kenya’s sable population declined from >235 individuals in the mid-1970s to ca. 60 individuals in 2015 (>74% decline in 40 years). Given the low number, small distribution, and rapid decline, sable in Kenya qualifies as a nationally ‘Critically Endangered’ species. Recommendations for the conservation of sable in Kenya are provided.

**Distribution of mitochondrial clades and morphotypes of baboons Papio spp. (Primates: Cercopithecidae) in eastern Africa**

Dietmar Zinner, Christina Keller, Julius W. Nyahongo, Thomas M. Butynski, Yvonne A. de Jong, Luca Pozzi, Sascha Knauf, Rasmus Liedigk & Christian Roos.

**ABSTRACT**

Recent genetic studies, using maternally inherited mitochondrial DNA, indicate a complex evolutionary history for baboons *Papio* spp. in general, and for eastern African baboons in particular. To further address this topic and to improve our understanding of phyleogeographic patterns of baboons in eastern Africa, mitochondrial cytochrome b sequence data were analysed from 148 baboon samples from 103 locations in eastern Africa.


Adult male olive baboon *Papio anubis* (left) and adult male yellow baboon *Papio cynocephalus* (right). Drawings by Jonathan Kingdon (Butynski et al., 2013).
The resultant phylogenetic reconstructions suggest an initial split of baboons into four main clades: southern chacma baboons, baboons from Mahale Mountains in Tanzania, main southern, and main northern. We confirm that the boundary between southern and northern clades lies along the Ugalla-Malagarasi River and Ruaha-Rufiji River of central Tanzania. We detected new mitochondrial haplogroups, most notably the Mahale Mountains clade, and refined haplogroup distributions. The evolutionary divergence of baboons in eastern Africa was most likely triggered and maintained by numerous episodes of population division and reconnection, probably related mainly to climate change. To better understand these processes, nuclear DNA information is required, especially to assess gene flow among populations.
Publications and Reports

Published


In press


Submitted

- Butynski, T. M. & De Jong, Y. A. Mount Kenya potto is a subspecies of eastern potto *Perodicticus ibeanus*.
- Butynski, T. M. & De Jong, Y. A. Taxonomic status of the Mount Kilimanjaro guereza colobus monkey (Primates, Cercopithecidae, *Colobus*).

In preparation

- De Jong, Y. A., d’Huart, J. P. & Butynski, T. M. Biogeography of the desert warthog *Phacochoerus aethiopicus* (Pallas, 1766) and common warthog *Phacochoerus africanus* (Gmelin, 1788) in the Horn of Africa.
Rainfall on Lolldaiga Hills Ranch

Species totals as of end of March 2017

Mammals on the Lolldaiga Hills Conservation Landscape.................................104 species
Birds on Lolldaiga Hills Ranch.................................................................382 species
Birds on the proposed IBA/KBA...................................................................525 species
Reptiles on Lolldaiga Hills Ranch...............................................................33 species
Amphibians on Lolldaiga Hills Ranch.......................................................12 species
Butterflies on Lolldaiga Hills Ranch..........................................................135 species
Moths on Lolldaiga Hills Ranch................................................................200 species

Except for moths, species list for the above taxonomic groups can be viewed at www.lolldaiga.com

Best Zoological Society of London/Lolldaiga Hills Research Programme camera trap photographs on Lolldaiga Hills Ranch (March 2017)

Savanna elephant *Loxodonta africana*

Mountain reedbuck *Redunca fulvorufula*
Greater kudu *Tragelaphus strepsiceros*

Günther’s dik-dik *Madoqua guentheri* (‘frosted’ colour morph in the background)

Olive baboon *Papio anubis*

Striped hyaena *Hyaena hyaena*
Common duiker *Sylvicapra grimmia*

Klipspringer *Oreotragus oreotragus*

Mountain reedbuck *Redunca fulvorufula*