Volume 20

April 2009

African Bat Conservation News

ISSN 1812-1268

Inside this issue:

Above: Botswana Long-eared bat (*Laephotis botswanae*) (ECJS-11/2009) caught in the Chitabi area, Okavango Delta, Botswana.

NOTICE BOARD

Conferences

50th Anniversary Conference of the Zoological Society of Southern Africa

To be held at: Natalia, Illovo Beach, KwaZulu-Natal, 21- 25 July 2009.
Further information: http://www.zssa.co.za/

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Further information: http://www.zssa.co.za/

10th International Mammalogical Congress

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12th European Bat Research Symposium - Lithuania, August 2011.

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OBSERVATIONS, DISCUSSIONS AND UPDATES

Observation #: 6 - *Nycteris* sp. from Liwonde-NP, Malawi

Submitted by: Chris Roche
Date of observation: 18 January 2009
Locality: Malawi: Balaka Province, Liwonde National Park
GPS: 10˚35'32''S 33˚48'54''E
Photo: Sue Snyman

Email message:

At least three individuals roosting within a well known hollow baobab on the eastern bank where the Shire River exits Lake Malombe opposite a fishing village known as Mvela. - **Chris Roche**

Editorial response:

Old Baobab trees are an important roosting site for many of the cave dwelling species that are able to exist in the savanna areas, in the absence of caves. These large trees, become hollow and create a cave like structure that are used. Other species of bat that would utilize these sites are Horseshoe (*Rhinolophus* sp.) and leaf-nosed bats (*Hipposideros* sp.). - **Ernest Seamark**

Identification as a Slit-faced bat (*Nycteris* sp.) supported by: Ernest Seamark, Peter Taylor and Victor Van Cakenberghe.

Observation #: 7 - Vesper bat from Nyika-NP, Malawi

Submitted by: Chris Roche
Date of observation: 23 January 2009
Locality: Malawi: Rumphi Province; Nyika National Park; Chelinda Safari Lodge
GPS: 14˚46'28''S 35˚17'22''E
Photo: Chris Roche

Email message:

More than 15 dead individuals observed in different closed up chalets at Chelinda Safari Lodge in central Nyika National Park. The bats had presumably entered the chalets through the chimney and not be able to exist the chalets (the lodge had been un-operational for at least 6 months by that stage). - **Chris Roche**

Editorial response:

This one looks like one the little brown bats, I am (supposed to be) working on, but I have no idea. The reference to the chimney might point to "Pipistrellus" nanus, keeping in mind that Peters, 1852 did mention his type specimens to have been taken from a chimney, but I also suppose that there are many other Vespertilionid species linked with chimneys. Perhaps it should be referenced as "Vespertilionid bat". - **Victor Van Cakenberghe**

…the LBJ dubious, possibly *N. capensis*. - **Peter Taylor**

Identification as a Vesper bat (Vespertilionidae) supported by: Ernest Seamark, Peter Taylor and Victor Van Cakenberghe.

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Observation #: 8 - Mauritian tomb bat: Maun Botswana

Submitted by: Mark Muller
Date of observation: 2008 and 2009
Locality: Botswana: Maun, 3 km; Sedie ward; Main Sehitwa road
GPS: See below
Photo: Mark Muller

Email message:

As requested I list below the trees and GPS positions of each tree in which I have found Mauritian tomb bats in my garden:

Site 1: *Kigelia africana* - S 19.96404 E 23.45752 - One lone bat occupied this tree on and off for two years.

Site 2: *Philenoptera capassa* - S 19.96397 E 23.45701 - One lone bat occupied a roost in this tree. The site this bat chose was well shaded by a dense growth of creepers which died when we cut back the stem. As a result of this the site became quite exposed and the bat moved on - possibly to site 3.

Site 3: *Philenoptera capassa* - S 19.96390 E 23.45697 - This tree is heavily colonised by a 28 year old growth of Bougainvillea offering dense shade to the roost. Initially when I found this roost last year [2008] there were two bats using it? They seemed to disappear in winter but I found a group of four of these guys using the roost when I checked it out a couple of weeks ago [10/01/2009]. This roost is within five yards of my kitchen door and very easy to check. I need to check out the winter occurrence of these guys to verify if they remain in the garden or not.

I have been noting that these Bats will not leave their roost site until it is fully dark - Last night, 27/02/2009, I checked them at 19h15 and they were all still in the roost but interestingly had moved a long way down the tree trunk to get away from the overhanging cover and I presume to clear the way for a "drop" away launch from the trunk. I walk my dog every morning very early & again yesterday, 27/02/2009, at 05.15 - still dark I noted that three of the bats were back at the roost. So it appears from this that they show no signs of being crepuscular here. However there are a couple of Bat Hawks that, from time to time, work the floodplain in front of my house - this may be why they are waiting until it is fully dark.

01/03/2009

Further to the messages of last night I advise that this morning I sat next the Tomb bat roost in my garden - the lower part of the tree trunk is quite well illuminated by the peripheral throw of light from a security light I have on the corner of my home. I was using binoculars to further enhance my "Night Vision".

The first bat flew in at 05h45, landed briefly, low down on the tree trunk, and took straight off again, I then had to leave for 15 minutes & got back at 06h00 and two bats were home, I missed the third bat coming in but the fourth bat came in, on a couple of fly pasts, between 06h10 and 06h14 before landing finally, again low down on the tree at 06h14. This bat perched where it landed in an alert head up posture for +-30 secs before making its way up the tree trunk in a couple of swift but semicircular moves of about 0.5 of a meter each time - it did not just scuttle straight up the trunk to join the other three.

I was very focused on watching the tree trunk and so I may be wrong in my impression here but I think the last bat to come in was in fact patrolling around my security light (which was behind me) and picking up a few last minute snacks of the insects that were attracted to the light in the very early almost pre-dawn light. My observations of flying bats were made difficult by the fact that I was sitting very close to the fruit bat roost (see observation 9) and these guys were having their normal early morning social fly pasts for the whole time - accordingly I found it difficult in the very low light conditions to work out exactly which bat was a tomb bat. According to my GPS sunrise today is at 06h23, Sunset at 15h54. This bat then, contrary to my observations above, is crepuscular to a degree.

- **Mark Muller**

Editorial response:

Identification as a Tomb bat (*Taphozous mauritianus*) supported by: Ernest Seamark, Peter Taylor and Richard Jenkins.

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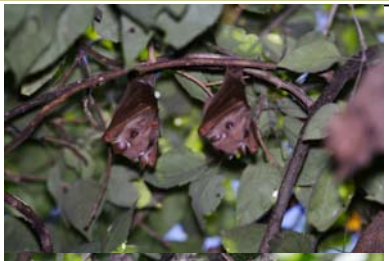

Observation #: 9 - Fruit bat roost in Maun Botswana

Submitted by: Mark Muller
Date of observation: 28 February 2009
Locality: Botswana: Maun, 3 km; Sedie ward; Main Sehitwa road
GPS: See below
Photo: Mark Muller

Email message:

I attach pics of Gambian fruit bats taken at 11.00 today the 28/02/2009.

Today there are:-

Two regular roosts in the garden in Croton trees that are +-15 meters apart.
Roost 1 has 18 bats and Roost 2 has 8 bats in it - this second roost is very densely shaded & the bats are difficult to find - there could be a couple more.

The numbers in each roost fluctuate from day to day - my guess is that this is in fact one colony that uses two sites that are very close together. There are other sites in the garden that have been used and my gut feel is that they like the shadiest sites in the garden. When the shade in a particular site is compromised for any reason they will move away to a shadier site.

These bats can be very entertaining to watch as they stretch a lot and groom themselves a lot by partially opening up their wings and licking the inside of the wing and grooming their bodies.

These bats leave their roost sites after sunset but while there is still excellent light levels. The bats return to their roost sites in the very early first light of dawn and the return to the roost is a social time for them with bats flying in and out of the preferred site and communicating vocally all the time - it is actually lovely watching them flying around and around the roost site in the dim quiet light of the very early morning. These bats display real intelligence and tend to watch your every movement with real interest - they are a very lovely little creature.

I will continue to monitor the sites carefully as winter approaches to see if they move away from the garden as the deciduous trees start to drop their leaves and the levels of shade cover fall away.

It is 16.00 here - we have just had a short sharp downpour and I went out to see if there was a chance of pics of the bats in the Wet to find that most of those in the less protected site had moved - I cannot find to where - so the assumption is that they do not like getting wet?

- **Mark Muller**

Editorial response:

Identification as a Epauletted fruit bat (*Epomophorus* sp.) supported by: Ernest Seamark.

Spelling changes to specific names of the genus *Neoromicia* – RICCUCCI and LANZA (2008)

The genus *Neoromica* is feminine consequently the gender for the following specific names need to be changed:-

Old spelling	Corrected spelling
N. africanus	*N. africana*
N. ater	*N. atra*
N. brunneus	*N. brunnea*
N. minusculus	*N. minuscule*
N. nanus	*N. nana*
N. notius	*N. notia*
N. pusillus	*N. pusilla*
N. somalicus	*N. somalica*

Reference:

RICCUCCI, M., and LANZA, B., 2008. *Neoromica* Roberts, 1926 (Mammalia Vespertilionidae): Correction of gender and etymology. *Hystrix It. J. Mamm.* **19**(2): 175-177.

Mops bakarii new species – STANLEY (2009)

STANLEY (2009) described a new species of *Mops* from Pemba Island, Tanzania. The specific name "*bakarii*" was selected to honor Dr. Bakari Asseid, Director of the Department of Commercial Crops, Fruits and Forestry, Zanzibar, to recognize his contribution of natural habitats and biota of Zanzibar (including both Pemba and Unguja Islands). *Mops bakarii* is similar to *M. brachypterus*, but lacks the basisphenoid pits which are present in *M. brachypterus*.

References

STANLEY, W. T., 2009 [for 2008]. A new species of *Mops* (Molossidae) from Pemba Island, Tanzania. *Acta Chiropterologica* **10**(2): 183-192.

Triaenops menamena replacement description for *T. rufus* and *T. humbloti* specimens from Madagascar – GOODMAN and RANIVO (2009)

GOODMAN and RANIVO (2009) conclude that the type series associated with the names *Triaenops rufus* and *T. humbloti*, which is a junior synonym of the former species, collected by Léon Humblot between 1879 and 1880 during a mission to Madagascar (deposited in the Muséum national d'Histoire naturelle, Paris) are morphologically and mensurally different from the more recent material of *T.* cf. *rufus* from Madagascar and are similar to animals from east Africa and the Middle East. The critical point is that Humbolt's type series of *T. rufus* and *T. humblot* were not collected on Madagascar and do not represent populations on the island associated with the name *T.* cf. *rufus*.

To resolve the ambiguity of the specific name that should be applied to the Malagasy populations assigned to *T.* cf. *rufus*, GOODMAN and RANIVO (2009) provide a replacement name (*Triaenops menamena*). The name *menamena* is derived from the Malagasy word "*mena*" meaning "red" and which, in common usage, when repeated twice mans "reddish". This replacement name was chosen for "rufus" to conjure the same descriptive sense of the pelage coloration.

References

GOODMAN, S. M., and RANIVO, J., 2009. The geographical origin of the type specimens of *Triaenops rufus* and *T. humbloti* (Chiroptera: Hipposideridae) reputed to be from Madagascar and the description of a replacement species name. *Mammalia* **73**(1): 47-55.

RECENT LITERATURE

PUBLISHED PAPERS

CERVENÝ, J., and KOUBEK, P., 2008. Four new bat species from the "territory of the Czech Republic". *Vespertilio* 12: 11-14.

Twelve individuals of fruit bats belonging to four species, *Eidolon helvum*, *Rousettus aegyptiacus*, *Epomophorus gambianus*, and *Micropteropus pusillus*, were captured during three nights using ornithological mist nets. The fruit bats were caught when foraging in the garden of the Embassy of the Czech Republic in Dakar (Senegal), where they fed on ripe fruits of the neem trees (*Azadirachta indica*).

GARCIA-MUDARRA, J. L., IBÁÑEZ, C., and JUSTE, B. J., 2009. The Straits of Gibraltar: Barrier or bridge to Ibero-Morroccan bat diverstiy? *Biological Journal of the Linnean Society* 96(2): 434-450.

Genetic divergence in bat communities was assessed on both sides of the Straits of Gibraltar and cryptic diversity was examined. Screening was carried out using partial sequences of the mitochondrial (mt)DNA cytochrome b gene on 399 individual bats belonging to the 18 species found on both sides of the Straits of Gibraltar. For those bats that showed important genetic discontinuities, molecular markers (ND1 and nuclear RAG2 genes) were added to expand the sampling process. Phylogenetic reconstructions were obtained using maximum parsinomy, genetic distances, maximum likelihood, and Bayesian criteria. As an estimate of bats' flight performance, we measured for each species the wing aspect ratio and wing loading indexes, and correlated them with the maximum pairwise genetic distances obtained between southern Iberian and northern Moroccan populations. Genetic mtDNA distances between populations on both continents exceed 5% in seven out of 18 bat species analysed and unknown lineages were uncovered within the species complexes *Myotis nattereri* and *Myotis mystacinus*. We did not find a general pattern in the degree of permeability of the Straits of Gibraltar for bats. Genetic distances were not correlated with the ability to cross the Straits. Our study shows that the cryptic diversity uncovered among bats continues to increase as more regions are studied.

GOODMAN, S. M., and RANIVO, J., 2009. The geographical origin of the type specimens of *Triaenops rufus* and *T. humbloti* (Chiroptera: Hipposideridae) reputed to be from Madagascar and the description of a replacement species name. *Mammalia* 73(1): 47-55.

The bat genus *Triaenops* (Hipposideridae) is broadly distributed in Africa, portions of the Near East, and islands in the Indian Ocean (Madagascar, western Seychelles). Three species of *Triaenops* are currently recognized in Madagascar, all endemic (*T. rufus* , *T. auritus*, and T. furculus), with *T. humbloti* being a synonym of *T. rufus*. *Triaenops persicus* has a broad distribution in Africa and portions of the Middle East. After comparisons of "Madagascar" specimens previously referred to *T. humbloti* and the holotype and paratypes of *T. rufus* collected by Léon Humblot to a series of specimens currently referred to *T*. "*rufus*" from numerous and widespread localities in Madagascar, as well as series of *T. persicus* obtained in Iran and Tanzania, the Humblot material is different in external, cranial, and dental characters and measurements from the Malagasy animals. The provenance of the Humblot specimens is probably Aden (Yemen) or perhaps Somalia and the name *T. rufus* should not be used for the species in Madagascar; a holotype associated with the replacement name is presented herein.

HOCKMAN, D., CRETEKOS, C. J., MASON, M. K., BEHRINGER, R. R., JACOBS, D. S., and ILLING, N., 2008. A second wave of Sonic hedgehog expression during the development of the bat limb. *PNAS* 105(44): 16982-16987.

Sonic hedgehog (*Shh*) plays an integral role in both the anteriorposterior (A-P) patterning and expansion of developing vertebrate limbs through a feedback loop involving *Fgfs*, *Bmps*, and *Gremlin*. In bat limbs A-P patterning and the size of the digital field are unique. The posterior digits of the forelimb are elongated and joined by tissue, whereas the thumb is short. The hindlimb digits often are uniform in length. Here, we reveal novel expression patterns for *Shh* and its target, *Patched 1* (*Ptc1*), during limb development in two bat species. Early *Shh* expression in the zone of polarizing activity is wider in the bat forelimb than in the mouse forelimb, correlating with the reported expansion of *Fgf8* expression in the apical ectodermal ridge and the early loss of symmetry in the bat forelimb. Later in limb development, *Shh* and *Ptc1* expression is reinitiated in the interdigital tissue. *Shh* is graded along the A-P axis in forelimb and is expressed uniformly at a lower level across the hindlimb interdigital tissue. We also show that the reported *Fgf8* expression in the interdigital tissue precedes the expression of S*hh.* We propose that the reinitiation of *Shh* and *Fgf8* expression in bat limbs reactivates the *Shh-Fgf* feedback loop in the interdigital tissue of stage 16 bat embryos. The cell survival and proliferation signals provided by the *Shh-Fgf* signaling loop probably contribute to the lengthening of the posterior forelimb digits, the survival of the forelimb interdigital webbing, and the extension of the hindlimb digits to a uniform length.

JUNKER, K., BARBUTO, M., CASIRAGHI, M., MARTIN, C., UNI, S., BOOMKER, J., and BAIN, O., 2008. *Litomosa chiropterorum* Ortlepp, 1932 (Nematoda: Filarioidea) from a South African Miniopterid: Redescription, Wolbachia screening and phylogenetic relationships with Litomosoides. *Parasite* 15: 1-8.

69 *Miniopterus natalensis*, type host of the onchocercid *Litomosa chiropterorum*, were collected in caves in the Western Province and Gauteng Province, South Africa. The prevalence of these filariae was about 50 %. The microfilaria is folded, as in other *Litomosa* and an *area rugosa* composed of cuticular bosses is present in the male posterior region. *L. chiropterorum* is close to the species parasitic in other *Miniopterus* spp. and some *Rhinolophus* spp. from Africa, Madagascar and Europe; it is unique with the expanded anterior extremity and the four cephalic submedian bosses. The molecular analysis of *L. chiropterorum*, the first done with *Litomosa* species from a bat, supports the hypothesis that *Litomosa* and *Litomosoide*s, which have an exceptionally large buccal capsule in common, form a group in which *Litomosa* has a basal position. Interestingly, *L. chiropterorum* does not harbour *Wolbachia,* as proved with immunohistological staining and PCR screening using the 16S rDNA gene as target. This is contrary to *L. westi* from rodents and the majority of the *Litomosoides* species parasitic in bats or rodents. The absence of *Wolbachia* in a filarioid group considered ancient based on traditional and molecular approaches opens interesting scenarios on the evolution of the endosymbionts spread through filarial lineages.

KANKAM, B. O., and ODURO, W., 2009. Frugivores and fruit removal of Antiaris toxicaria (Moraceae) at Bia Bioshere Reserve, Ghana. *J. Trop. Ecol.* 25(2): 201-204.

LEVIN, E., YOM-TOV, Y., and BARNEA, A., 2008. Frequent summer nuptial flights of ants provide a primary food source for bats. *Naturwissenschaften*: e1-7.

In many ant species, nuptial flight tends to be short in time and assumed to be synchronous across a large area. Here, we report that, in the upper Jordan Valley, northern Israel, massive nuptial flights of Carpenter ants (*Camponotus* sp.) occur frequently throughout the summer, and their alates form up to 90% of the diet of the greater mouse-tailed bat (*Rhinopoma microphyllum*) during this period. This fat and protein-rich diet enables female bats to lactate during summer, and the large amount of fat that both sexes accumulate may serve as an energy source for their following winter hibernation and posthibernation mating in early spring (March–April). We suggest that the annual movement of these bats to the Mediterranean region of Israel may have evolved in order to enable them to exploit the extremely nutritious forms of ant alates when the bats' energetic demands are highest.

LEVIN, E., YOM-TOV, Y., BARNEA, A., and HUCHON, D., 2009 [for 2008]. Genetic diversity and phylogeography of the greater mouse-tailed bat *Rhinopoma microphyllum* (Brünnich, 1782) in the Levant. *Acta Chiropterologica* 10(2): 207-212.

The greater mouse-tailed bat (*Rhinopoma microphyllum*) possesses a large geographical range, covering most of the arid and warm areas of the Old World. We studied the genetic variability of this species using two mitochondrial markers (the cytochrome *b* gene and the control region), from several Israeli colonies and from over most of the species' range. Our results show that the cytochrome *b* sequences, unlike those of the control region, are too conserved to separate among *R. microphyllum* populations. Based on the control region sequences, a high level of sequence similarity was found within the Israeli population. Three clades were observed over the species' range: Oriental, Intermediate and Palaearctic. This division supports most of the traditional taxonomy of the species. The Israeli population, which belongs to the Palaearctic clade, was found to be isolated from the Oriental and Intermediate clades. We suggest that the colonization of the greater mouse-tailed bat in the Levant occurred from African populations during the late Pleistocene, when many Saharan plants and animals penetrated the northern part of the Great Rift Valley.

LIERON, V., POULOUIN, E., AMEZIAN, M., QNINBA, A., and THEVENOT, M., 2008. Inventaire des Chiroptères de l'arrière-pays du port Tanger-Méditerranée (Nord-Ouest du Maroc). *Bulletin de l'Institut Scientifique, Rabat, Sciences de la Vie* 30: 53-54.

MONADJEM, A., and RESIDE, A., 2009 [for 2008]. The influence of riparian vegetation on the distribution and abundance of bats in an African savanna. *Acta Chiropterologica* 10(2): 339-348.
Riparian habitats are known to be important for bats across the world, however this is largely unstudied in Africa. We investigated the community structure of bats in riparian areas and the surrounding savanna landscape in Swaziland's lowveld using mist nets and a harp trap. We found riparian sites overall had higher bat activity, diversity, species richness and abundance. One species (*Epomophorus wahlbergi*) accounted for 52.6% of captures. Seasonality had no effect on overall captures, nor did distance from nearest riparian habitat for savanna sites. Echolocation guilds were correlated with vegetation characteristics, with CF (constant frequency), FM (steep frequency-modulated) and FM-QCF (broadband FM) bats more frequently captured at sites with denser undergrowth than QCF (quasi-constant frequency or narrowband FM) bats; conversely, QCF bats were more frequently caught at sites with lower canopy cover than other bats. Our findings suggest that although bats discriminate between microhabitats, they do not respond to larger-scale habitat features in the way that other taxa, such as birds, are found to. In conclusion it appears that riparian areas are important foraging sites for bats within African savannas.

ODUKOYA, S. A., ADEEYO, O. A., OFUSORI, D. A., AYOKA, O. A., OLUWAYINKA, O. P., AKINYEYE, A. J., OJO, G. B., ASHAMU, A. E., and BABATUNDE, L. S., 2009. Partial septate uterus and tubal implantation: a normal phenomenon in the *Eidolon helvum*. *Scientific Research and Essay* 4(1): 13-17.
The aim of the study was to investigate the macro and micro-anatomical adaptations in the uterus and the type and nature of implantation found in *Eidolon helvum*. A total of thirty pregnant bats sampled from Obafemi Awolowo University Campus were used in this study. They were harvested and sacrificed by cervical dislocation after being carefully assessed and confirmed to be presumably healthy. Abdominopelvic incisions were made on the bats to expose and excise their uteri. The uteri were observed macroscopically while some were fixed in 10% formol saline and processed for routine Heamatoxylin and eosine (H&E) staining procedure and Verhoeff-van Giesson's stain. It was observed that the uterus of *E. helvum* possesses a partial septum that divides the uterine cavity into two compartments also; the lateral end of either of the uterine limbs was always enlarged or distended more than the other. As the dormant zygote began to develop in either of the uterine limbs, it grew lateromedially causing the particular limb to distend gradually towards the midline of the body. The uterine body did not participate in any way in carrying the developing fetus till term. Tubal implantationa pathologic condition in some mammals was also observed to be natural in *E. helvum.* Thus, the presence of partial septate uterus and tubal implantation being a normal phenomenon in the *E. helvum* shows its primitiveness as a mammal.

RICCUCCI, M., and LANZA, B., 2008. *Neoromica* Roberts, 1926 (Mammalia Vespertilionidae): Correction of gender and etymology. *Hystrix It. J. Mamm.* 19(2): 175-177.

STANLEY, W. T., 2009 [for 2008]. A new species of *Mops* (Molossidae) from Pemba Island, Tanzania. *Acta Chiropterologica* 10(2): 183-192.
The bats of Pemba are poorly known, but recent surveys have provided material to critically examine the species that occur on this island, roughly 50 km off the coast of Tanzania. A new species of *Mops* (Molossidae) is described from Pemba and aspects of its distinguishing characteristics from other molossids and habitat are discussed. This new species differs from the type of *M. brachypterus* by lacking basisphenoid pits. The form *brachypterus* needs critical review.

TONG, S., CONRARDY, C., RUONE, S., KUZMIN, I. V., GUO, X., TAO, Y., NIEZGODA, M., HAYNES, L., AGWANDA, B., BREIMAN, R. F., ANDERSON, L. J., and RUPPRECHT, C. E., 2009. Detection of novel SARS-like and other Coronaviruses in bats from Kenya. *Emerging Infectious Diseases* 15(3): 482-485.
Diverse coronaviruses have been identified in bats from several continents but not from Africa. We identified group 1 and 2 coronaviruses in bats in Kenya, including SARS-related coronaviruses. The sequence diversity suggests that bats are well-established reservoirs for and likely sources of coronaviruses for many species, including humans.

VALLO, P., GUILLÉN-SERVENT, A., BENDA, P., PIRES, D. B., and KOUBEK, P., 2009 [for 2008]. Variation of mitochondrial DNA in the *Hipposideros caffer* complex (Chiroptera: Hipposideridae) and its taxonomic implications. *Acta Chiropterologica* 10(2): 193-206.
The Afrotropical leaf-nosed bat *Hipposideros caffer* has been traditionally regarded as a complex of populations, currently pertaining to two recognized cryptic species, *H. caffer* and *H. ruber*. Extent of distribution and morphological variation of these bats has raised concerns over whether the current perception of the complex reflects true phylogenetic relationships and taxonomic diversity. Our phylogenetic analysis of nucleotide sequences of the mitochondrial cytochrome *b* gene challenged the hypothesis of two cryptic species. Instead of the two reciprocally monophyletic lineages expected, corresponding to the two species, we recovered four distinct lineages with deep internal divergences. Two sister clades within a lineage of bats of *H. caffer* represent respectively the nominotypical form *H. c. caffer*, restricted to Southern Africa, and *H. c. tephrus*, inhabiting the Maghreb, West Africa and the Arabian Peninsula. Geographical isolation and deep genetic divergence suggest species status of both the forms. Another lineage comprises specimens of both morphotypes from West and East Africa. It probably represents a distinct species but its taxonomic assignation remains obscure. A Central African lineage of *H. ruber* comprises two sister clades, which become sympatric in Cameroon. Their status has to be clarified with additional evidence, since nuclear gene flow might be taking place. A further divergent lineage with *H. ruber* morphotype, most probably representing another distinct species, is restricted to West Africa. Although all three genetic forms of *H. ruber* may correspond to named taxa, their proper taxonomic assignation has to be assessed by comparison with type material.

WEBALA, P., CARUGATI, C., CANOVA, L., and FASOLA, M., 2009. Bat assemblages from eastern Lake Turkana, Kenya. *Revue d'Ecologie (Terre Vie)* 64.

Les peuplements de chauves-souris ont été étudiés par piégeage sur sept sites sur la bordure Est du lac Turkana, Kénya, région où le statut et la distribution de ces mammifères demeuraient inconnus. Nous avons capturé 97 individus de 13 espèces appartenant à 6 familles: Mégadermatidés (*Cardioderma cor*), Rhinolophidés (*Rhinolophus clivosus*), Nyctéridés (*Nycteris hispida* et *N. thebaica*), Vespertilionidés (*Myotis tricolor*, *Nycticeinops schlieffeni*, *Pipistrellus kuhlii* et *Neoromicia nanus*), Molossidés (*Chaerephon pumila*, *Mops condylurus* et *M. demonstrator*), Emballonuridés (*Taphozous perforatus* et *Coleura afra*). *Lavia frons* (Mégadermatidés) a été observé mais non capturé. La présence de bâtiments autour des stations de piégeage a affecté de manière significative le succès du piégeage. L'abondance, la richesse et la diversité se sont avérées variables selon les sites, en relation avec des différences dans la structure écologique des habitats forestiers, semi-désertiques ou insulaires. La richesse et la diversité étaient plus fortes dans les sites protégés et non pâturés que dans ceux non protégés et surpâturés par le bétail. Le surpâturage aurait un effet néfaste sur les peuplements de mammifères, augmentant ainsi les risques de perte de biodiversité dans les zones sauvages.

WILD, T. F., 2009. A new family of emerging Paramyxoviruses. *Pathologie Biologie* 57(2): 188-196.

Paramyxoviruses have been implicated in both animal and human infections. Some viruses, such as Morbilliviruses are responsible for large-scale epidemics. However, there are limited observations of these viruses crossing the host species barrier in nature. In 1994, in Australia a fatal infection in horses and humans was identified to be caused by a new Paramyxovirus, Hendra virus (HeV), and in 1998 in Malaysia, a closely related virus, Nipah virus (NiV) was responsible for fatal infections in pigs and humans. These two viruses were sufficiently different from previously described Paramyxoviruses to create a new genus, Henipaviruses. The natural reservoir of these viruses was the fruit bat (*Pteropus*), which is found in regions extending from the western Pacific to the eastern coast of Africa. Serological studies have established that as many as half the fruit bats in colonies throughout these regions may have antibodies against this family of viruses. The availability of diagnostic reagents for Nipah virus in humans have identified infections in several countries including, Bangladesh, India and Indonesia. In some of these epidemics, mortality in humans exceeds 75%. Deforestation is probably responsible for fruit bats leaving their ecological niches and approaching farms and villages. The infection of humans and animals may occur via contaminated foods or in certain cases by animals to man. At present, only within close families has human-to-human transmission been proposed. Henipavirus infections are probably more widespread than it is at presently known and so it is important to have an intense monitoring for these diseases, especially in countries where large-scale deforestation is happening.

ZHOU, Z. M., GUILLÉN-SERVENT, A., LIM, B. K., EGER, J. L., WANG, Y. X., and JIANG, X., 2009. A new species from southwestern China in the Afro-Palearctic linage of the horseshoe bats (*Rhinolophus*). *Journal of Mammalogy* 90(1): 57-73.

A new species of horseshoe bat (Chiroptera: Rhinolophidae) is described from southwestern China. The presence of a wedge-shaped sella and pointed connecting process of the nose leaf aligns the new species to the *landeri* group in the Afro-Palearctic lineage of *Rhinolophus*. However, the new species is distinctly separable from these allopatrically distributed species by its noticeably larger body size. Other sympatric large-sized species of *Rhinolophus* have rounded connecting processes. Molecular systematic analyses based on mitochondrial cytochrome-b sequences confirmed the affinity of the new species to the Afro-Palearctic lineage, but in a clade most closely related to the *ferrumequinum*, *fumigatus*, and *maclaudi* groups. Of these species, only *R. ferrumequinum* ranges into Asia and overlaps in distribution with the new species. *R. ferrumequinum* is similar in general body size and external appearance; however, the new species is distinct in the characteristics of the nose leaf, skull, and baculum. The presence of a new species from southwestern China in the Afro-Palearctic lineage indicates a more complex historical biogeographic scenario within *Rhinolophus* than previously known. The difficulties found in allocating the new species to one of the phenetically described traditional species groups stress the convenience of using a phylogenetically based systematic organization of the genus *Rhinolophus*.

Call for contributions

African Bat Conservation News publishes brief notes concerning the biology of bats, new geographical distributions (preferably at least 100 km from the nearest previously published record), sparsely annotated species lists resulting from local surveys including roost counts and echolocation and sonograms of bat species occurring on the African continent and adjacent regions, including the Arabian peninsula, Madagascar, and other surrounding islands in the Indian and Atlantic oceans.

African Bat Conservation News Project Cycle

Issues will be published Quarterly (January, April, July, October).

Deadlines for scientific contributions (1 November, 1 February, 1 May, 1 August).

Deadlines for non-scientific contributions (1 December, 1 March, 1 June, 1 September).

General contributions should be sent to the editor: EditorABCN@Africanbats.org

Scientific Contributions should be sent to: ScientificEditorABCN@Africanbats.org