

Confluence of Babongo and Sangha Rivers, Sangha Lodge, CAR.

Central African Republic and Cameroon, February 4-12, 2017

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Access road to Sangha Lodge, CAR

Central Africa is one of the few remaining parts of the world where flora and fauna are still poorly known, discoveries are possible at every step, and even a short trip should be undertaken as a serious scientific expedition. During a week-long visit to Sangha Lodge and vicinity in CAR and to SE Cameroon I saw 105 species of mammals (including 26 lifers), 264-265 species of birds (including such goodies as nkulengu rail, white-crested heron, vermiculated fishing owl, all hornbills of the region, niam-niam parrot, green-breasted pitta, Sangha bush-robin, and Dja River scrub-warbler), ~25 species of herps (mostly frogs and lizards) and 5 species of fish. The best mammal of the trip was flightless anomalure, never before seen by a scientist; I photographed it and observed for about 20 minutes.

For CAR, trip reports by Jon Hall and Venkat Sankar on mammalwatching.com were particularly helpful. I'll provide some updates and an annotated species list for the area. For birds and herps info and with any other questions, please email me to dinets@gmail.com.



SW CAR and SE Cameroon (hereafter "the area"). Highly schematic and not to scale; for reference only.

<u>Abbreviations</u>: BH –Bai Hokou (area of DNNP where "bai walk" is conducted), DB – Dzanga Bai in DNNP, DNNP – Dzanga Ndoki National Park, LFC – Libongo Forest Concession (not sure what the official name is), NSS – Ngato study site (see below), RC – Rod Cassidy (owner of Sangha Lodge), SL – Sangha Lodge, TC – Tamar Cassidy (Rod's wife).

General notes

Sangha Lodge

1. You can get from SL to Yaoundé for under \$100; I suppose it's also possible the other way but I didn't do it as I timed my visit to a flight from Yaoundé to Bayanga (\notin 270-300). Here's how: first, ask RC to arrange a motorbike to Linjombo (2 hrs, CFA10-20k; wear sunglasses for eye protection; you can also choose a jeep ride for CFA 80k, but it is longer and less comfortable because the road is essentially a motorbike path). Cross the river by boat (CFA1k; don't pay more than

CFA2k to CAR border guards). The boat takes you to Libongo in Cameroon; there is a basic hotel there for CFA6k, but it is better to spend time in LFC (see below). There is also a pay phone and some very helpful English-speaking policemen. From Libongo you can hire a motorbike to Poumbe (officially Salapoumbe) on Yokadouma-Moloundou road (CFA20-30k, ~100 km, 2-3 hrs), where cars and logging trucks pass every hour or so. The ride to Yokadouma costs CFA5-10k and takes 5-6 hours by car; from there you can get to Bertoua (CFA2-5k, 7-10 hrs, the most uncomfortable part of the trip), and then by bas to Yaounde's main bus terminal (CFA800, 4 hrs by paved road, frequent buses 24/7). There are also direct buses at 8 am about twice a week from Libongo to Yokadouma, but they are slow, uncomfortable and unpredictable (it's unknown if there will be a bus next morning until one arrives from Yokadouma around 6 pm).



Vicinity of Sangha Lodge. Very approximate.

2. SL is one of the best places in the world to study small mammals. It has amazing diversity (17 species of shrews, the world record); rare and little-known mammals tend to be particularly common here; there is an excellent trail network that you pretty much have to yourself; RC's employees are highly skilled in working with mistnets and pitfall traps. I had 17 Sherman traps and 2 mistnets; RC provided 7 metal cans for pitfall traps. Sherman traps got 2 rodents and 1 shrew in 62 trap-nights (plus a few mice in RC's house); pitfalls got 1 shrew in 28 trap-nights; mistnets got 9 bats of 5 species in 3 nights. The success rate would probably be higher if it wasn't for the moonlight and the dry season (the forest floor was littered with tree seeds). Next time I'll also bring Tomahawk traps and modified fish traps for otter shrews.

3. Small mammal activity declined dramatically when there was bright moonlight; try to schedule your visit around new moon. When there is moonlight, better look for mammals along Babongo River (accessible by short side trails from River Trail); in dry season it ranges from knee- to chest-deep, is easy to wade along, and attracts larger animals; you can also just sit on a log and watch as various wildlife swims in the river or comes to drink. It's better to do this naked because there is a lot of mud on the shores and some on the bottom. During the rainy season you can enter the extensive swamps along that river by boat (next time I'll bring my inflatable kayak).

3. SL area was mostly hunted out prior to RC acquiring the lodge. There is still some poaching, but generally the wildlife is steadily recovering; even heavily hunted species such as **red river hog** are now present. It used to be a good idea to combine your stay at SL with a short stay at cheaper Doli Lodge near the DNNP office, but this is no longer the case as Doli Lodge is now at the edge of expanding Bayanga village and pretty much all species are easier to see around SL.



Sangha Lodge trails

Cameroon sites

<u>Libongo Forest Concession</u>, a large area of primary forest crossed by Libongo-Salapoumbe road, proved to be an excellent place to see many rare species of large mammals simply by walking the first 20 km from <u>Libongo</u> entrance and back. The entrance is 5-10 min from Libongo by motorbike (CFA500 each way). The road is closed for traffic at night. I was there on the night of full moon and could spot animals without a flashlight, then turn the light on as I got closer. This road is also excellent for birding and for tracking studies; in some places the sand is so fine that you can see shrew tracks. In one place the road was completely covered by **bongo** and **buffalo** tracks for at least 300 m. I didn't walk past ~20 km, but the remaining part of the road had a lot fewer tracks when I went there by motorbike next day. The concession ends at Km 64; the remaining ~36 km to the main road had no animal tracks except for one old **buffalo** pie. The logging company (SEFAC) now operates a safari camp, accessible by a side road; should be an interesting place to visit.

<u>Ngato</u> is a pathetic-looking village on Yokadouma-Moloundou Road, covered with a thick layer of red dust. A side road leads to <u>Boumba River bridge</u> ~6 km away (ask for directions to Masea), where a group of students from a few East European countries was conducting a shrew study at the time of my visit (they asked not to provide any details as they were working without permits). They had a line of 300 pitfall traps in selectively logged forest and had average success rate of ~1 shrew per 30 trap-nights. I had about the same rate at SL, but they said it should've been much higher there and my traps were too small for larger shrews, which is why the only one I got was the smallest *Crocidura* in the area. I visited NSS for one evening, one night and one morning; the guys also held the previous night's catch for me, so I saw 14 shrews of 7 species plus 2 rodents (see below). The moon was full but, unlike further S, the nights were overcast so there was a lot of small mammal activity. I also caught one bat there in two mistnets. Larger mammals have mostly been hunted out in the area (although it's technically part of <u>Boumba Bek National Park</u>) and particularly along the Yokadouma-Moloundou Road, where the forest is badly degraded and even birds larger than doves are mostly absent.

<u>Yokadouma-Bertoua Road</u> (150 km) was in very bad shape; night drive in a Toyota Corolla with 7 passengers took 9 hours, with only a dozen nightjars and one **Kemp's gerbil** seen. The N outskirts of Bertoua open into surprisingly good savanna habitat just 3 km from the city center, but I had only one morning there and saw mostly birds.

Annotated mammals list of SW CAR and SE Cameroon

Compiled from IUCN range maps, RC's data, trip reports, DNNP list (http://www.dzanga-sangha.org/content/listmammals; contains many errors and doesn't include bats), my records and other sources. Numbered are the species I saw. I provide ID tips for shrews as they are difficult to find elsewhere (all sizes in centimeters; hb = head & body, t = tail, hf = hind foot).

"Insectivores"

- **1. Lesser Congo shrew** (*Congosorex verheyeni*). Hb5.5-9.5 t2-4, dark-brown, black tail completely naked. A recently described semi-fossorial species endemic to NW Congo Basin; common in DNNP. One seen feeding at a termite swarm along Northern Trail at SL.
- **2. Lesser large-headed shrew** (*Paracrocidura schoutedeni*). Hb6.5-9.6 t3.3-3.8, dark, black-tailed, big-headed. One of the most common shrews in the area's forests. One trapped at NSS; one possibly seen on Loop Trail at SL but identification is uncertain.
- **3. Remy's pygmy shrew** (*Suncus remyi*). Hb3.5-4.5 t1-2, light reddish-brown. Probably the smallest mammal in Africa, endemic to NW Congo Basin. Generally considered rare, but apparently common at SL (RC once found one in a freshly dug garbage pit). I got one in a Sherman trap near River Trail, but the trap didn't snap and I shook the contents out without checking them, so instead of having this shrew in hand I only saw it running away.
- Goliath shrew (*Crocidura goliath*). Hb12-16 t9-10, red-brown, golden belly, long guard hairs. Rare in CAR, more common in S Cameroon. Two were trapped at NSS (at the N edge of its known distribution), but not when I was there.
- **4. Olivier's shrew** (*C. olivieri*). Hb10-14 t7-10, black, thick tail with short bristles. One of the most common and widespread shrews in Africa. I saw two animals chasing each other through low brush and rank grass on a roadside on the N outskirts of Bertoua, in broad daylight. Often trapped at NSS, but not during my visit. Shrew tracks on the road through LFC were probably of this species.
- Ugandan musk shrew (*C. mutesae*). Hb10-11.5 t7-8, black, thick tail with long bristles. Known from a handful of specimens from Central Africa, including some from DNNP; probably a synonym of the previous species.
- **5. Tumultuous shrew** (*C. turba*). Hb9.5-10.5 t5-6, dark brown, grey belly, long nose with blob on tip. Common and widespread in Equatorial Africa; the commonest shrew at NSS, where trapped almost nightly; 4 trapped in two nights before and during my visit.
- Butiaba naked-tailed shrew (*C. littoralis*). Hb8.5-10 t6.5-7.7, brown, grey throat, naked tail. Widespread but uncommon in inland Equatorial Africa. Caught a few times at NSS, but not when I was there.
- **6.** Small-footed shrew (*C. parvipes*). Hb7-8.5 t3.2-5.2, speckled brown, grey belly, sharply bicolored tail with thick base, long ears. A widespread but uncommon species; said to occur at bais in DNNP. One trapped at NSS.
- 7. Bates's shrew (C. batesi). Hb7-9 t5.2-6, dark-brown, bicolored tail. An uncommon rainforest shrew. Two trapped at NSS.
- African black shrew (C. nigrofusca). Hb6.5-7.8 t5.5-7.2, dark-brown, grey belly. Listed on DNNP site; occurrence in the area uncertain.
- 8. Hildegarde's shrew (*C. hildegardeae*). Hb6-8 t3.7-5.4, glossy-brown, grey belly, bicolored tail with bristles on basal half. Common forest shrew of Equatorial and East Africa. Three trapped at NSS.
- **9.** Grasse's shrew (*C. grassei*). Hb6-7 t6-6.7, light-grey, bushy tail. Occurs in undisturbed primary forest; should be present in DNNP, but not listed on the park website. The rarest species at NSS; one caught on the night before my visit was the first in three weeks.
- Long-tailed musk shrew (*C. dolichura*). Hb6-7.5 t9.5-11.5 hf<1.5, slaty-grey, almost naked tail. Common forest species in the area, but rare at NSS (only one caught in three weeks, not during my visit).
- **10.** Long-footed shrew (*C. crenata*). Hb6-7 t7.5-9.5 hf>1.5 red-brown, naked ears and legs, long nose. The rarest shrew in DNNP, known from just one specimen. Common at NSS, where two trapped during my visit.
- 11. Dent's shrew (*C. denti*). Hb6-7 t4-5, dark-brown, slaty belly, bristles on basal 2/3 of tail, short nose. Common forest species of Equatorial Africa. One seen escaping a driver ant swarm near Masesi's Trail at SL. Often caught at NSS, but not during my visit.
- 12. Ludia shrew (*C. ludia*). Hb5.5-6.5 t6-6.5, red-brown, narrow head. Rare, little-known endemic of N Congo Basin. One trapped in a pitfall trap on River Trail at SL.



Ludia shrew (Crocidura ludia), Sangha Lodge, CAR.

- Giant forest shrew (*Sylvisorex ollula*). Hb8.5-11 t5.3-6.5 dark, short head. Locally common in the area (the most often seen shrew in C Congo), but never caught at NSS.
- Rain forest shrew (*S. pluvialis*). Hb7-8 t6-7, pale-brown, white belly, hairy tail with a small tuft. A recently described species known only from Korup NP in Cameroon and Kongana area in DNNP.

- **13. Kongana shrew** (*S. konganensis*). Hb6-7 t3-4, dark-grey, truncated ears. Recently described species with highly localized distribution. One seen moving through a vine tangle about 25 cm above ground in "Zenkerella Thicket" on Loop Trail at SL.
- 14. Johnston's forest shrew (*S. johnstoni*). Hb4.4-5.6 t2.4-2.8, slaty-grey, light-grey belly, oval ears. The most common *Sylvisorex* of western Central Africa, but never caught at NSS. One seen escaping a driver ant swarm near Loop Trail at SL.
- Four-toed hedgehog (Atelerix albiventris). Listed on DNNP website; absent in the area according to IUCN.
- Congo golden mole (*Huetia leucorhina*). Occasionally caught by hunters in SL area; reportedly tunnels below the leaf litter and can be caught by hand.
- Stuhlmann's golden mole (Chrysochloris stuhlmanni). Possible in the area as there are scattered records E and W of it.
- **15. Giant otter shrew** (*Potamogale velox*). Widespread in the area. One seen swimming in Babongo River at SL (ask TC for the exact location); floats very low in the water and looks like a moving bunch of whiskers at a distance.
- Four-toed sengi (Petrodromus tetradactylus). Listed on DNNP website; not known N of Congo River according to IUCN.

Fruit bats

- **16. Hammer-headed fruit bat** (*Hypsignathus monstrosus*). One seen flying over the road in LFC; I've never seen it up close and would really like to find a lek someday. Seasonally common at SL.
- African straw-coloured fruit-bat (Eidolon helvum). Widespread in the area according to IUCN.
- Franquet's epauletted fruit-bat (Epomops franqueti). Widespread in the area according to IUCN.
- Peter's epauletted fruit-bat (*Micropteropus pusillus*). Widespread in the N part of the area according to IUCN.
- Little collared fruit-bat (Myonycteris torquata). Widespread in the area according to IUCN; recorded from Bangui.
- Angolan fruit-bat (Lissonycteris angolensis). Widespread in the area according to IUCN.
- 17. Short-palated fruit-bat (*Casinycteris argynnis*). Widespread in the area according to IUCN. One accidentally spotted roosting high in a tree along the road to Linjombo.
- **18. Bergmans' fruit-bat** (*Scotonycteris bergmansi*). A recently described species (split from *S. zenkeri*). Rare and local in the area according to IUCN. Three caught in one night (all within 30 min) in a mistnet set behind the SL office.



Bergmans' fruit-bat (Scotonycteris bergmansi), Sangha Lodge, CAR.

- **19. Woermann's bat** (*Megaloglossus woermanni*). Widespread in the area according to IUCN. One seen feeding in a flowering tree near the beginning of River Trail at SL.
- Veldkamp's bat (Nanonycteris veldkampii). Common in the N part of the area according to IUCN.
- Egyptian fruit-bat (Rousettus aegyptiacus). Possible in the area (particularly in the W) according to IUCN.

Vespertilionid bats

- Allen's striped bat (Glauconycteris alboguttata). Present in the area according to IUCN.
- Silvered bat (G. argentata). Widespread in the area according to IUCN.
- Bibundi bat (G. egeria). Present in the area according to IUCN.
- Beatrix's bat (G. beatrix). Widespread in the area according to IUCN.
- Curry's bat (G. curryae). Present in the area according to IUCN.
- Abo bat (G. poensis). Present in the area according to IUCN.
- Pied bat (G. superba). Very rare species, not impossible in the area according to IUCN.
- Glen's wattled bat (G. gleni). Known from two specimens, one from Uganda and one from Lomie in SC Cameroon.
- Variegated butterfly bat (G. variegata). Possible in the area according to IUCN.

- **20. Moloney's flat-headed bat** (*Mimetillus moloneyi*). Widespread in the area; recorded in S DNNP. One seen at dusk flying along the bank of Sangha River at SL; easy to recognize as it looks like a kingfisher in flight.
- Somali pipistrelle (Pipistrellus somalica). Present in the area according to IUCN.
- Slender-winged pipistrelle (P. tenuipinnis). Widespread in the area according to IUCN.
- Cape pipistrelle (*P. capensis*). Widespread in the area according to IUCN.
- Banana pipistrelle (*P. nana*). Widespread in the area according to IUCN.
- Rendall's pipistrelle (P. rendalli). Possible in the N of the area according to IUCN. Recorded in Mbeki in S DNNP.
- Broad-headed pipistrelle (Pipistrellus crassulus). Present in the area (mostly in the S) according to IUCN.
- Grandidier's pipistrelle (P. grandidieri). Recorded in Mbeki in S DNNP.
- Mouselike pipistrelle (Hypsugo musciculus). Present in the area (mostly in the S) according to IUCN.
- Nut-colored yellow bat (Scotophilus nux). Present in the area according to IUCN.
- African yellow house bat (S. dinganii). Possible in the N of the area according to IUCN.
- **21.** Bocage's myotis (*Myotis bocagii*). Not known in the area according to IUCN. Three caught in a mistnet set across Babongo River at SL, all very low above the water.



Bocage's myotis (Myotis bocagii), Sangha Lodge, CAR.

- Copper woolly bat (Kerivoula cuprosa). Present in the area (mostly in the S) according to IUCN.
- Lesser woolly bat (K. lanosa). Widespread in the area according to IUCN.
- Spurrel's woolly bat (K. phalaena). Present in the area (mostly in the S) according to IUCN.
- Smith's woolly bat (K. smithii). Present in the area according to IUCN.

Other bats

- 22. Black-hawk bat (Saccolaimus peli). Often seen at SL as it feeds above Sangha River at dusk. I saw it only once.
- Mauritian tomb bat (Taphozous mauritianus). Likely occurs in the area according to IUCN, but no actual records.
- **23.** African sheath-tailed bat (*Coleura afra*). Not known from the area according to IUCN. One found day-roosting in the toilet near BH parking lot; flew away before being photographed.
- Yellow-winged bat (Lavia frons). Widespread in the area according to IUCN.
- Large slit-faced bat (Nycteris grandis). Widespread in the area according to IUCN.
- 24. Dja slit-faced bat (N. major). Widespread in the area according to IUCN. One apparently seen in Big Tree near Picathartes site.



Bates's (Nycteris arge, left) and large-eared (N. macrotis) slit-faced bats, Sangha Lodge, CAR.

- **25.** Large-eared slit-faced bat (*N. macrotis*). Widespread in the area according to IUCN. Seven seen in the "porcupine cave" near SL (ID a bit uncertain).
- **26.** Bates's slit-faced bat (*N. arge*). Widespread in the area according to IUCN. A few seen nightly flying around (and sometimes inside) the dining hall at SL, but were not caught despite much effort. ID based on previous captures.
- Hairy slit-faced bat (N. hispida). Widespread in the area according to IUCN; recorded from Doli Lodge.
- 27. Intermediate slit-faced bat (*N. intermedia*). Widespread in the area according to IUCN. One seen in Big Tree near *Picathartes* site.
- Dwarf slit-faced bat (N. nana). Widespread in the area according to IUCN; recorded in S DNNP.
- Cape slit-faced bat (N. thebaica). Possible in the N part of the area according to IUCN.
- Rüppell's horseshoe bat (Rhinolophus fumigatus). Occurs in the N part of the area according to IUCN.
- Lander's horseshoe bat (R. landeri). Widespread in the area according to IUCN.
- **28.** Halcyon horseshoe bat (*R. alcyone*). Widespread in the area according to IUCN. One caught in a mistnet at the junction of North and Shortcut Trails at SL; another one caught in a mistnet at NSS but escaped.



Halcyon horseshoe bat (Rhinolophus alcyone), Sangha Lodge, CAR.

- Giant leaf-nosed bat (Hipposideros gigas). Widespread in the area according to IUCN.
- **29.** Cyclops roundleaf bat (*H. cyclops*). Widespread in the area according to IUCN. A few seen day-roosting inside Big Tree near *Picathartes* site across Sangha River from SL.
- Noak's roundleaf bat (*H. ruber*). Widespread in the area according to IUCN. There is a colony at BH.
- **30.** Sooty roundleaf bat (*H. fuliginosus*). Widespread in the area according to IUCN. One caught in a mistnet behind the SL office (ID a bit uncertain).
- **31. Benito roundleaf bat** (*H. beatus*). Widespread in the area according to IUCN. One caught in a mistnet at the junction of North and Shortcut Trails.



Sooty roundleaf bat (Hipposideros fuliginosus) and Benito roundleaf bat (H. beatus). Sangha Lodge, CAR.

- Greater roundleaf bat (H. camerunensis). Possible in the area according to IUCN.
- Sundeval's roundleaf bat (H. caffer). Possible in the area according to IUCN.
- Short-tailed roundleaf bat (H. curtis). Possible in the W of the area according to IUCN.
- Greater long-fingered bat (Miniopterus inflatus). Present in the area according to IUCN.
- 32. Medje free-tailed bat (*Tadarida congicus*). A few roosted in the church in Yokadouma and could be seen emerging at dusk.
- **33.** Dwarf free-tailed bat (*T. nanulus*). Widespread in the area according to IUCN. Many seen emerging from a large hollow tree at NSS.
- Spurell's free-tailed bat (T. spurelli). Widespread in the area according to IUCN. Recorded in S DNNP.
- Trevor's free-tailed bat (*T. trevori*). Possible in the area according to IUCN.
- Abruzzi's wrinkle-lipped bat (T. aloysiisabaudiae). Present in the area according to IUCN.
- Railer bat (T. thersites). Widespread in the area according to IUCN.
- Sierra Leone mops bat (*T. brachypterus*). Present in the area according to IUCN.
- Russet wrinkle-lipped bat (T. russatus). Present in the area according to IUCN.
- Ansorge's wrinkle-lipped bat (T. ansorgei). Possible in the N of the area according to IUCN.
- Bini free-tailed bat (Myopterus whitleyi). Widespread in the area according to IUCN.

Primates

- Golden angwantibo (*Arctocebus aureus*). Present in the area according to IUCN. Never recorded in DNNP or around SL despite much effort; the habitat along Loop Trail at SL looks perfect for it.
- 34. Milne-Edwards' potto (Perodicticus edwardsi). Common around SL; I saw one in a large tree on the slope below the lodge.



Milne-Edwards's potto (Perodicticus edwardsii), Sangha Lodge, CAR.

- 35. Southern needle-clawed galago (Euoticus elegantulus). Widespread in the area; common around SL; two seen along Loop Trail.
- **36. Demidov's dwarf galago** (*Galagoides demidoff*). Widespread in the area; common in and around SL where a few seen along trails and the access road and many heard. Subspecies *anomurus*.
- 37. Thomas's dwarf galago (G. thomasi). Widespread in the area, common around SL where a few seen along trails and many heard.
- Northern lesser galago (*Galago senegalensis*). Possible in the N of the area according to IUCN; listed on DNNP website apparently in error.
- **38.** Gabon squirrel galago (*Sciurocheirus gabonensis*). Occurs locally in DNNP; I saw one on Loop Trail at SL and heard one along the road through LFC.
- Olive baboon (Papio anubis). Reportedly occurs in small numbers near Bertoua; listed on DNNP website apparently in error.
- **39.** Agile mangabey (*Cercocebus agilis*). Common in DNNP; two groups seen along the road to the bais in early afternoon. One group seen along the road through LFC in late morning.



Agile mangabey (Cercocebus agilis), Dzanha-Ndoki National Park, CAR.

40. Grey-cheeked mangabey (*Lophocebus albigena*). Common in DNNP; three groups seen along the road to the bais.
- Swamp monkey (*Allenopithecus nigroviridis*). Very rare and local in the area; recently recorded near the beginning of Swamp Forest Trail at SL; reliably seen on Bomassa Island a few hours by boat to the S.

- **41.** Crowned guenon (*Cercopithecus pogonias*). Common in DNNP, usually mixed with other species. A few seen in mangabey and putty-nosed guenon groups along the road to the bais in early afternoon. Subspecies *grayi*.
- **42.** Moustached guenon (*C. cephus*). Common in DNNP; a few seen with mangabeys along the road to the bais, and two with puttynosed guenons at BH. One seen with a group of guereza along the road through LFC. Subspecies *cephus*.



Moustached guenon (Cercopithecus cephus), Dzanga-Ndoki National Park, CAR.

- **43.** De Brazza's monkey (*C. neglectus*). Occurs in swamp forest across Babongo River from SL, heard a few times and once seen (3-5 individuals) feeding at sunset along River Trail.
- **44. Putty-nosed guenon** (*C. nictitans*). Common in DNNP; a few groups and individuals seen along the road to the bais, at BH and at DB. Present around SL; small groups seen along trails and the access road, as well as from Sangha River. Subspecies *nictitans*.
- **45.** Northern talapoin (*Miopithecus ogouensis*). Absent in CAR and not reported from Libongo area. Reportedly the only surviving monkey species at NSS, where I saw a group of 5-10 in late morning in very dense secondary growth along Boumba River.
- **46.** Guereza (*Colobus guereza*). Uncommon in DNNP; one group seen from a plane while descending towards Sangha River. A larger group seen in the distance along the road through LFC in late morning. Subspecies *occidentalis*.
- Black colobus (*Colobus satanas*). Occurs in the W part of the area according to IUCN; historically as far N as Bertoua. Might be present farther along Ngato-Gribe road.
- Oustalet's red colobus (*Piliocolobus oustaleti*). Very rare in DNNP where mostly limited to the far S. Reportedly present in Ngotto Forest on the road to Bangui. No records from Cameroon.
- **47. Western gorilla** (*Gorilla gorilla*). Common in DNNP (the highest density anywhere); seen either on gorilla trekking tours or during bai visits. As trekking is expensive, I'd recommend leaving it until the end of your trip in case you see gorillas elsewhere. I saw a group of 7 (including a silverback and a mother with twins) at the first bai at BH; the park then tried to charge me for gorilla trekking, but RC fought them valiantly on my behalf. Occasionally visits SL area; I found one possible handprint on the bank of Babongo River. Reportedly seen along the road through LFC sometimes. Subspecies *gorilla*.



Western gorillas (Gorilla gorilla), Dzanga-Ndoki National Park, CAR.

- **48.** Chimpanzee (*Pan troglodytes*). Rare in DNNP; occasionally heard from SL. I briefly saw one very shy group in early morning from the road through LFC. Subspecies *troglodytes*.
- **49. Human** (*Homo sapiens*). Unlike humans in most parts of the world, Ba'aka pygmies are a truly native rather than invasive population, and hence are countable.

Carnivores

50. African palm civet (*Nandinia binotata*). Common throughout the area; popular in bushmeat trade. A few seen around SL; 1-2 individuals were feeding late at night in flowering capoc tree above the dining hall on most nights. Subspecies *binotata*.



African palm civets (Nandinia binotata), Sangha Lodge, CAR.

- **51.** African civet (*Viverra civetta*). Common in the area. One animal and multiple tracks seen on the road through LFC; one trackway seen in the mud along the trail to DB in DNNP.
- **52.** Large-spotted genet (*Genetta maculata*). Widespread in the area according to IUCN; listed on DNNP site. One seen at night near NSS. Subspecies *letabae*.
- **53.** Servaline genet (*G. servalina*). Widespread in the area according to IUCN; listed on DNNP site. One seen at noon (!) near the watchtower at DB, where it was mobbed by an army of small birds. Tracks seen on the road through LFC. Subspecies *servalina*.
- Housa genet (G. thierryi). Should be present in Bertoua area according to IUCN.
- Giant genet (G. victoriae). Listed on DNNP website, apparently in error (although not entirely impossible).
- Aquatic genet (G. piscivora). Listed on DNNP website, apparently in error (although not entirely impossible).
- Central African oyan (*Poiana richardsonii*). Widespread in the area but apparently uncommon. There are sight records from DNNP; I saw fresh tracks on SL access road. Subspecies *richardsonii*.
- **54. Marsh mongoose** (*Atilax paludinosus*). Very common in the area; its tracks were the most common carnivore tracks on all roads except the road through LFC, where they were second most common after tracks of golden cat. Seen once on Babongo River near SL and once on Boumba River near NSS. Subspecies *macrodon* in CAR and *spadiceus* in Cameroon.
- 55. Long-nosed mongoose (Herpestes naso). The most common diurnal carnivore in the area; one seen at BH.
- Egyptian mongoose (*H. ichneumon*). Possible in the N of the area according to IUCN.
- Common slender mongoose (H. sanguineus). Possible in the area (particularly in the N) according to IUCN.
- **56.** Black-footed mongoose (*Bdeogale nigripes*). Widespread in the area. One seen at night on the road through LFC; tracks seen on the road from Ngato to NSS.
- **57. Flat-headed cusimanse** (*Crossarchus platycephalus*). Widespread in the area. One seen in late afternoon on Pitta Trail at SL; tracks seen near River Trail at SL and on the road through LFC.
- **58.** Congo clawless otter (*Aonyx congicus*). Locally common; recently returned to SL area. One seen in late morning feeding in the mud (probably on tadpoles or frog eggs) in an almost-dry pond near the end of Swamp Forest Trail at SL.



Congo clawless otter (Aonyx congicus), Sangha Lodge, CAR.

- African clawless otter (A.capensis). Occurs in the N part of the area according to IUCN.
- Spot-necked otter (Hydrictis maculicollis). Widespread but rare and local; occurs in clearwater rivers.
- Honey badger (Mellivora capensis). Supposedly occurs throughout the area; listed on DNNP website. Subspecies cottoni.
- **59.** African golden cat (*Felis aurata*). Widespread in the area. One cat and tracks of at least 5 others seen along the road in LFC; apparently a reliable place for this species. RC has seen tracks near SL a few times. Subspecies *aurata*.
- Leopard (*Panthera pardus*). Widespread in the area. I saw tracks on a riverbank near River Trail at SL; TC heard one animal the previous day, and I smelled one at the far end of Pitta Trail. Subspecies *leopardus*.

Ungulates



Three species of megafauna at Dzanga Bai, Dzanga-Ndoki National Park, CAR.

60. Giant forest hog (*Hylochoerus meinertzhageni*). Common in areas with low hunting pressure. A group of five observed for many hours at DB. Subspecies *rimator*.



Giant forest hogs (Hylochoerus meinertzhageni), Dzanga-Ndoki National Park, CAR.

61. Red river hog (*Potamochoerus porcus*). Common and widespread in areas with low hunting pressure. Recently returned to SL area, where one seen and later a large group heard at Babongo River. One surprisingly cooperative individual observed in early morning near the first bridge from Libongo on the road through LFC; multiple tracks seen on that road.



Red river hog (Potamochoerus porcus), Libongo Forest Concession, Cameroon.

- **Hippo** (*Hippopotamus amphibius*). Listed on DNNP website but not present in the area according to IUCN. Reportedly can be seen by taking a short boat trip in Ngotto Forest on the road to Bangui. Subspecies *amphibius*.
- **62.** Water chevrotain (*Hyemoschus aquaticus*). Widespread but uncommon. Recently returned to SL area. I saw it twice (almost certainly the same individual) at the intersection of Elephant Trail and Babongo River; there were also tracks at another place farther downstream. Subspecies *batesi*.
- **63.** Peters' duiker (*Cephalophus callipygus*). Widespread in the area, but rare in areas with hunting pressure. One seen at dawn near the road through LFC. Subspecies *callipygus*.
- **64.** Bay duiker (*C. dorsalis*). One of the more common duikers throughout the area, except where hunting pressure is too high. One seen at Big Trees Trail at SL. Subspecies *castaneus*.
- White-bellied duiker (C. leucogaster). Widespread but rare in the area. Subspecies leucogaster.
- **65.** Black-fronted duiker (*C. nigrifrons*). Widespread in areas with low hunting pressure. One seen in early evening at Swamp Forest Trail at SL. Subspecies *nigrifrons*.
- Yellow-backed duiker (C. silvicultor). Widespread but rare in the area. Subspecies longiceps.
- **66.** Blue duiker (*Philantomba monticola*). The most common duiker in the area despite heavy hunting pressure (appears to be the most commonly sold bushmeat). Habituated individuals live at SL; at the time of my visit there was a female with a charming calf. One seen in early afternoon with a group of agile mangabeys along the road to the bais in DNNP. Subspecies *congica*.



Blue duikers (Philantomba monticola), Sangha Lodge, CAR.

- Dwarf antelope (*Neotragus batesi*). Status in CAR uncertain. Said to be common in SE Cameroon in cocoa plantations; I spent two hours spotlighting at a cocoa plantation near NSS but didn't see any mammals larger than rats.
- **67. Bongo** (*Tragelaphus eurycerus*). Uncommon in DNNP, where often seen at bais during the dry season. I briefly saw a group of three at DB, but they never ventured into the open during the time I was there. Apparently abundant in LFC: I saw 12 in one night, and the road was covered with countless tracks; in one place a 300-m stretch of the road was completely trampled over.
- **68.** Kewel bushbuck (*T. scriptus*). Status in DNNP uncertain. Apparently common in SE Cameroon. I saw one individual (at night) and tracks of a few others along the road through LFC. Subspecies *phaleratus*.
- **69.** Sitatunga (*T. spekii*). Common in DNNP where occasionally seen at bais. Increasingly common around SL. I saw one in late morning in a clearing along Babongo River near SL, and multiple tracks at BH. Apparently less common in LFC, where I saw only one track on the road. Subspecies *gratus*.
- **70.** African buffalo (*Syncerus caffer*). Common in DNNP; I saw two groups of 2 and 9 animals, respectively, for most of the day at DB. Apparently also common in LFC, where numerous tracks and dung piles were present on the road. Subspecies *nanus*.



Forest buffalo (Syncerus caffer nanus), Dzanga-Ndoki National Park, CAR.

Other large mammals

- Giant pangolin (*Manus gigantea*). Widespread in the area but very rare. Reportedly more common in some remote places in DNNP. 71. Black-bellied pangolin (*M. tetradactyla*). A diurnal species, widespread but rare even in areas with low hunting pressure. A
- habituated female is continuously tracked near SL, and is easy to observe.
- 72. White-bellied pangolin (*M. tricuspis*). A nocturnal species, generally rare but increasingly common around SL, where the density is suspected to be the highest anywhere. One seen along Loop Trail and another in the thickets on the slope below the lodge.



Black-bellied (Manis tetradactyla, left) and white-bellied (M. tricuspis) pangolins, Sangha Lodge, CAR.

- Western tree hyrax (*Dendrohyrax dorsalis*). Common and widespread. Multiple individuals could be heard around SL during my first few nights there, but almost ceased to call later due to full moon just as I decided to try to see one. Subspecies *nigricans*.
- Rock hyrax (*Procavia capensis*). Occurs in the N of the area according to IUCN; a skin was for sale in a roadside market in Bertoua. Subspecies *bamendae*.
- **73.** Forest elephant (*Loxodonta cyclotis*). Common in DNNP and increasingly around SL. ~70 were present at Dzanga Bai all day; small groups seen at most of the bais at BH where one male charged us repeatedly. Around SL they were most common along Babongo River; I tried to avoid getting too close, but heard them nightly and saw small groups twice; also one individual near the access road. In Cameroon they are apparently much less common; there were only a few tracks on the road through LFC.



Forest elephants (Loxodonta cyclotis), Dzanga-Ndoki National Park, CAR.

- Aardvark (Orycteropus caffer). Widespread in the area according to IUCN; listed on DNNP website. Probably subspecies ericssoni or leptodon.

Non-murid rodents

- 74. African pygmy squirrel (*Myosciurus pumilio*). Doesn't occur in the area according to IUCN. Occasionally seen around the *Picathartes* site near SL; I briefly saw one there.
- Gambian sun squirrel (Heliosciurus gambianus). Listed on DNNP website, apparently in error. Possible N of Bertoua.
- 75. Red-legged sun squirrel (*H. rufobrachium*). The most commonly seen squirrel at SL, in DNNP and at NSS. I saw many in each of these places. Sometimes follows guenons. Subspecies *aubryi*.
- 76. African giant squirrel (*Protoxerus stangeri*). Widespread in the area but generally uncommon. I saw a few around SL, mostly along Babongo River, and one at BH. Subspecies *eborivorus*.
- 77. Fire-footed rope squirrel (*Funisciurus pyrropus*). Relatively uncommon and difficult to see at SL and in DNNP; more common in Cameroon. One seen along Pitta Trail at SL on my last day there, and two at NSS. Subspecies *pyrropus* or an undescribed one.
- **78. Thomas's rope squirrel** (*F. anerythrus*). Widespread but difficult to see well. Often present in the morning around the dining hall and near Babongo River crossing at SL; I got relatively good views only once there and once along the road through LFC. Subspecies *bandarum* in CAR and *mystax* in Cameroon.

- **79. Lady Burton's rope squirrel** (*F. isabella*). Widespread in the area; very common and frequently heard around SL, but frustratingly difficult to see. I got the best views along the 500-m stretch of the SL access road nearest to the lodge. Apparently rare in Cameroon; never heard there.
- **80. Ribboned rope squirrel** (*F. lemniscatus*). Uncommon in DNNP and at SL; doesn't occur in CAR at all according to IUCN. More common in Cameroon. I saw only one at SL (along Pitta Trail), but four at NSS. Subspecies *lemniscatus* in Cameroon; the one in CAR seemed a bit brighter and could be an undescribed subspecies or even a different species.
- **81. Red-cheeked rope squirrel** (*F. leucogenys*). Uncommon in DNNP and at SL; doesn't occur there at all according to IUCN. More common in Cameroon. I got only poor views of two individuals along the access road to SL, and saw one well at NSS.
- **82.** Green bush squirrel (*Paraxerus poensis*). Widespread and generally easier to see than other squirrels; doesn't pay attention to people wading chest-deep through the water and so can be seen up close along Babongo River at SL and Boumba River at NSS.
- Western palm squirrel (Epixerus ebii). Possible in the area as occurs to the W and to the S according to IUCN. Subspecies wilsoni.
- **83. Striped ground squirrel** (*Xerus erythropus*). Occurs in the N of the area. One seen on the N outskirts of Bertoua. Subspecies *leucoumbrinus*.
- **84. Smoky dormouse** (*Graphiurus nagtglasii*). Occurs only in the N of the area according to IUCN, but actually present around SL. I saw one at the entrance to Northern Trail. Possibly this species nested in the dining hall a few years ago.
- 85. Lorraine dormouse (G. lorraineus). Widespread in the area. I saw one along the SL access road.
- Silent dormouse (G. surdus). Possible in the W of the area; occurs in SC Cameroon according to IUCN.
- African brush-tailed porcupine (*Atherurus africanus*). Common throughout the area despite heavy hunting pressure. Often present in two caves across Sangha River from SL (one at the *Picathartes* site, the other closer to the lodge), but not during my visit. Tracks seen on the road through LFC.
- Greater cane rat (Tryonomys swinderianus). Widespread in the area according to IUCN; listed on DNNP website.
- Ochre mole rat (Fucomys ochraceocinereus). Possible in the N of the area according to IUCN.
- 86. Beecroft's anomalure (Anomalurus beecrofti). Widespread in the area. Regularly seen along River Trail at SL; I saw one there.
- 87. Lord Derby's anomalure (*A. derbianus*). Widespread in the area; common around SL. In some years roosts in hollow trees in the lodge area; I saw one at a permanent roost in Big Tree near the *Picathartes* site.



Beecroft's (*Anomalurus beecrofti*, left) and **Lord Derby's** (*A. derbianus*) **anomalures**, Sangha Lodge, CAR. The bats in the photos are a **hairy slit-faced bat** (*Nycteris hispida*, near the anomalure) and **cyclops roundleaf bats** (*Hipposideros cyclops*).

- Lesser anomalure (A. pusillus). Occurs W and E of the area according to IUCN; listed on DNNP website.
- Zenker's pygmy anomalure (*Idiurus zenkeri*). Occurs W and E of the area; recorded in Ngotto Forest on the road to Bangui; listed on DNNP website.
- **88. Flightless anomalure** (*Zenkerella insignis*). Occurs in the area according to IUCN, but no actual records except for one old skin fragment from Ngotto Forest. I observed one in an area of particularly dense undergrowth on Loop Trail at SL (marked "Zenkerella Thicket" on the trail map); this was the first ever observation of a live animal of this species supported by photos.



Flightless anomalure (Zenkerella insignis), the first photos ever taken. Sangha Lodge, CAR.

Murid rodents

- Forest giant pouched rat (Cricetomys emini). Widespread in the area; common around SL.
- Northern giant pouched rat (*C. gambianus*). Possible in the N of the area according to IUCN.
- Pousargues's African fat mouse (Steatomys opimus). Occurs in the N of the area according to IUCN.
- **89.** Link rat (*Deomys ferrugineus*). An uncommon species of lowland rainforests, it is said to prefer seasonally flooded habitats, but I trapped it in *terra firma* forest along Northern Trail at SL. Often recorded by camera traps around SL.



Link rat (Deomys ferrugineus), Sangha Lodge, CAR.

- **90. Dollman's tree mouse** (*Prionomys batesi*). Uncommon and local; not found in the area according to IUCN, but listed on DNNP website. One seen in dense vegetation near Babongo River at SL.
- Banana climbing mouse (Dendromus missorius). Possible in the area as it occurs to the W and to the E according to IUCN.
- **91.** Shiny thicket rat (*Grammomys kuru*). Widespread in the area. One seen at night about 3 m above ground in dense undergrowth near the beginning of Northern Trail at SL.
- **92.** African smoky mouse (*Heimyscus fumosus*). Widespread in the area according to IUCN; listed on DNNP website. One caught in a pitfall trap at NSS.
- **93.** Peters' striped mouse (*Hybomys univittatus*). Widespread in the area according to IUCN; listed on DNNP website. One seen at dawn at NSS; one possibly at SL at dusk on the slope below the lodge, but identification uncertain.
- **94. Beaded wood mouse** (*Hylomyscus aeta*). Widespread in the area. Three trapped in 8 trap-nights inside RC's house at SL. One lived under the dining hall roof and could be seen at night feeding in nearby palm trees when there was no moonlight.
- 95. Allen's wood mouse (H. alleni). Widespread in the area. One seen at night near the generator at SL.
- **96. Walter Verheyen's wood mouse** (*H. walterverheyeni*). Patchily distributed but locally common in the area. One trapped near Masesi's Trail at SL.



Walter Verheyen's (Hylomyscus walterverheyeni, left) and Beaded (H. aeta, adult and juvenile) wood mice, Sangha Lodge.

- **97. Little wood mouse** (*H. parvus*). Widespread in the area. One seen at night near the junction of Northern and Loop Trails at SL; one caught in a pitfall trap at NSS.
- Typical striped grass mouse (Lemniscomys striatus). Occurs in the N of the area according to IUCN.
- Fire-bellied brush-furred rat (Lophuromys nudicaudus). Widespread in the area according to IUCN; listed on DNNP website.
- Rusty-bellied brush-furred rat (L. sikapusi). Widespread in the area according to IUCN; not listed on DNNP website.
- 98. Big-eared swamp rat (Malacomys longipes). One animal and many tracks seen near the ponds at the end of Swamp Trail at SL.
- **99. Natal multimammate mouse** (*Mastomys natalensis*). Widespread throughout sub-Saharan Africa, mostly as human commensal. One seen at dusk crossing the road from Libongo to LFC.

- **100.** African marsh rat (*Dasymys incomptus*). Marginally occurs in the E of the area according to IUCN; not listed on DNNP website. One seen early in the morning crossing the road in tallgrass meadows between SL and Bayanga.
- Peter's mouse (*Mus setulosus*). Occurs in the area according to IUCN; listed on DNNP website.
- Pygmy mouse (Mus minutoides). Likely occurs in the area according to IUCN; listed on DNNP website.
- **101.** Rufous-nosed rat (*Oenomys hypoxanthus*). Widespread in the area, common at SL. One seen in the morning behind RC's house; Sherman traps placed there didn't catch it.
- 102. Jackson's soft-furred mouse (Praomys jacksoni). Widespread in the area; one seen at night near the end of Northern Trail at SL.
- Tullberg's soft-furred mouse (P. tullbergi). Occurs immediately W of the area according to IUCN; listed on DNNP website.
- **103.** Petter's soft-furred mouse (*P. petteri*). Occurs in the N of the area according to IUCN; one seen at night in a clearing near NSS (ID not 100% certain).
- Black rat (Rattus rattus). Widespread in the area according to IUCN; listed on DNNP website.
- **104.** Target rat (*Stochomys longicaudatus*). Widespread in the area, common at SL. Three seen in two hours at night in a cocoa plantation near NSS.
- 105. Kemp's gerbil (Gerbilliscus kempi). Occurs in the N of the area. One seen at night on a road E of Bertoua.
- Congo gerbil (Taterillus congicus). Possible in the NE of the area according to IUCN.



Skulls of **bongo** (*Tragelaphus eurycerus*, left), **red river hog** (*Potamochoerus porcus*, right), **western gorillas** (*Gorilla gorilla*) and **chimpanzees** (*Pan troglodytes*). Dzanga-Ndoki National Park, CAR.

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Crepuscular rays over Sangha River, Sangha Lodge, CAR.