# The Rediscovery of Buffon's Tarsier 

Cécile Callou • Jacques Cuisin • Colin Groves

Received: 16 September 2009 / Accepted: 17 March 2010 /
Published online: 4 November 2010
(C) Springer Science+Business Media, LLC 2010


#### Abstract

The tarsier described by Buffon and Daubenton (1765) is the source of all scientific names given to tarsiers, with the sole exception of Simia syrichta Linnaeus 1758, until the early the 19th century, and most even up to the 1820s. It is therefore extremely important to try to determine precisely what this individual might have been. We here summarize what is known of the specimen and its history, and of other specimens with which it has potentially been confused. We argue that, though there is some room for doubt, in all probability this important species still exists.


Keywords Audebert • Buffon • Daubenton • Desmarest • Fischer • Geoffroy SaintHilaire • Paris museum • Tarsier • Tarsius tarsier • Tarsius • Tarsius spectrum • Taxonomy • Nomenclature • History of science

## The Original Description of Buffon's Tarsier

Georges Louis Leclerc, Comte de Buffon (1707-1778), wrote a 13-volume work, Histoire Naturelle Générale et Particulière, that appeared in stages between 1749 and 1767. In this work, he described-in a manner varying between cursory and incisive-a large number of previously unknown animals, mostly mammals; though sometimes based on little more than hearsay, they were most commonly based on real specimens in the King's Cabinet (of which he was Intendant), which had originated from a wide variety of sources. Most of Buffon's own descriptions were

[^0]supplemented by anatomical descriptions by his colleague Louis Jean-Marie Daubenton.

Buffon was aware of the Linnaean binomial system, concurrently being increasingly widely adopted, but he rejected it and continued to use vernacular names, even as other naturalists plundered his volumes for their content of new species to which they hastened to apply binomial names of their own. It would be fair to say that, of the formal scientific names given to mammals in the latter half of the 18th century, a fair proportion were based on Buffon's descriptions.

One of the mammals first described by Buffon is the tarsier, a primate of isolated taxonomic position, neither lemur nor monkey but with characters of its own. Several very distinct species exist, and their correct nomenclature depends on knowing which species Buffon actually described.

Buffon's description (1765, pp. 87-89) is as follows:

## Le Tarsier

Nous avons eu cet animal par hasard \& d'une personne qui n'a pu nous dire ni d'où il venoit ni comment on l'appeloit: cependant il est très remarquable par la longueur excessive de ses jambes de derrière; les os des pieds, \& sur-tout ceux qui composent la partie supérieure du tarse sont d'une grandeur démesurée \& c'est de ce caractère très-apparent que nous avons tiré son nom. Le Tarsier n'est cependant pas le seul animal dont les jambes de derrière soient ainsi conformées; la Gerboise... [here he lists several similarities with the jerboa...] ...tous deux ont la queue prodigieusement alongée \& garnie de grands poils à son extrémité; tous deux ont de très-grands yeux, des oreilles droites, larges \& ouvertes; tous deux ont également la partie inférieure de leurs longues jambes dénuée de poil, tandis que tout le reste de leur corps en est couvert... Le tarsier a cinq doigts à tous les pieds; il a pour ainsi dire quatre mains, car ses cinq doigts sont très-longs \& bien séparés; le pouce des pieds de derrière est terminé par un ongle plat, \& quoique les ongles des autres doigts soient pointus, ils sont en même temps si courts \& si petits qu'ils n'empéchent pas que l' animal ne puisse se servir de ses quatre pieds comme de mains... [further comparisons with the jerboa]...le tarsier avec sa petite taille, ses quatre mains, ses longs doigts, ses petits ongles, sa grande queue, ses longs pieds, semble se rapprocher beaucoup de la Marmose...
[We have obtained this animal by chance and from a person who could tell us neither where it came from nor what it was called; but it is very remarkable for the excessive length of its hind legs; the bones of the feet, and above all those which constitute the superior (proximal?) part of the tarsus are of an inordinate size and it is from this very noticeable characteristic that we have derived its name. The Tarsier is not however the sole animal whose hind legs are so shaped; the jerboa... [here follow the comparisons] ...both of them have the tail prodigiously elongated and garnished with long hairs at its extremity; both have enlarged eyes, ears which are straight, wide and open; both of them, as well, have the lower part of their long legs deprived of hair, although the whole of the rest of the body is covered with it... The tarsier has five digits on all its feet; it has, so to speak, four hands, because its five toes are elongated and well separated; the thumb of its hind feet ends with a flat nail, and although the nails of the other toes are pointed, they are at the same time so short and so small that they would not prevent the animal from using its four feet like hands...
the tarsier with its small size, its four hands, its long toes, its small nails, its long feet, seems greatly to resemble the marmoset...]

As was customary, Buffon's text was followed by a more businesslike description written by Daubenton (Buffon and Daubenton 1765, p. 9091):

## Description du Tarsier

Le Tarsier (pl. IX) est un petit animal conformé d'une manière fort extraordinaire, il a les jambes de derrière excessivement longues en comparaison de celles de devant, \& principalement la partie qui correspond au coup de pied \& au talon de l'homme; cette partie que les Anatomistes appelent le tarse, est aussi longue que le reste du pied dans l'animal qui fait le sujet de cette description, quoiqu'il ait les doigts fort longues.

Le corps du tarsier n'est pas plus grand que celui du mulot; mais les jambes de derrière sont plus longues que le corps, le cou \& la tête pris ensemble; la tête m'a paru ronde autant que j'ai pu juger des proportions de cet animal, sur un individu desseché \& racorni depuis long-temps; il avoit le museau très-court et mince, les yeux grands à l'excès, \& placés fort près l'un à l'autre; les oreilles longues, droites, nues \& transparentes comme celles des rats; la queue étoit fort longue, elle n'avoit du poil qu'à son origine $\&$ à son extrémité, \& il ne m'a pas paru qu'elle en eut perdu depuis la mort de l'animal; il y avoit à chaque pied cinq doigts menus \& fort longs; ceux des pieds de derrière étoient aussi longs que ceux des pieds de devant; les ongles étoient très-petits, collés sur le bout des doigts, de couleur blanchâtre \& pointus, excepté celui du pouce du pied de derrière qui étoit plat; ce pouce étoit gros et écarté comme le pouce d'une main, mais aussi long que le second doigt.

Le poil du tarsier étoit une sorte de laine longue de six à sept lignes, fort douce, de couleur cendrée-noirâtre sur la plus grande partie de sa longueur depuis la racine, $\&$ de couleur fauve-foncée à son extrémité, sur le dos, la croup \& le ventre, \& plus claire sur le reste du corps: il n'y avoit presque point de fauve sur la tête, elle étoit grise cendrée, principalement à l'endroit des joues, où il y avoit du poil long; le cendré paroissoit aussi avec le fauve sur tout le corps, les pieds étoient nus.

Le tarsier a trente-deux dents, savoir deux incisives \& deux canines à chaque mâchoire, \& six machelières de chaque côté; les incisives sont pointues, celles du dessous sont plus serrés l'une contre l'autre que celles du dessus; les canines de la mâchoire inférieure sont longues \& un peu courbées en arrière, celles de la mâchoire supérieure sont droites \& fort courtes; les trois premières machelières de chaque côté des mâchoires n'ont qu'une pointe.
[The Tarsier is a small animal shaped in an extraordinary manner, it has the hind legs excessively long in comparison to the forelegs, and especially the part which corresponds to the foot and heel of humans; that part which anatomists call the tarsus, is as long as the rest of the foot in the animal which was the subject of this description, even though the toes are extremely long.

The body of the tarsier is no larger than that of a field mouse, but the hind legs are longer than the body, the neck and the head taken together; the head appeared to me round, as much as I was able to judge the proportions of this animal, on an individual which had been desiccated and hardened for a long period; it had the muzzle very short and slender, the eyes excessively large, and placed very close to each other; the ears long, straight, naked and transparent like those of rats; the tail
was very long, it had no hair except at its base and at its extremity, and it did not seem to me that it had lost any since the death of the animal; on each foot it had five slender and very long toes; those of the hind feet were as long as those of the forefeet; the nails were extremely small, attached to the tips of the toes, whitish in colour and pointed, except for that of the thumb of the hind foot which was flat; this thumb was large, and divergent like the thumb of a hand, but as long as the second toe.

The hair of the tarsier was a sort of wool six or seven lines long [1 line= 0.08 inches $=2.12 \mathrm{~mm}$ ], very soft, of an ashy-blackish colour on most of its length from the root, and of a dark-fawn colour at its tip, on the back, the rump and the belly, and lighter on the rest of the body: there was hardly any fawn on the head, it was ashy grey, principally in the region of the cheeks, where there was long hair; the ashy colour accompanied the fawn throughout the body, the feet were naked.

The tarsier has thirty-two teeth, namely two incisors and two canines in each jaw, and six grinders on each side; the incisors are pointed, the lower ones are more crowded one against the other than the upper ones; the canines of the lower jaw are long and a little curved backward, those of the upper jaw are straight and very short; the first three grinders on each side of the jaws have only a single point.]

These passages are accompanied by a plate drawn by Jacques de Sève and engraved by Louis-Claude Legrand (Fig. 1). It was printed sometimes facing one way, sometimes the other, and it is unclear from this evidence alone which way the specimen had actually been mounted. The subject has evidently been mounted as if climbing a tree. The near-side limbs are in support positions; the far-side limbs are raised in climbing. The tail is looped forward between the hind legs and curves backward, passing in front of the near-side of the body. The face, which has the short slender muzzle described by Daubenton, seems to be surrounded by some sort of pale rim, prominent especially on the cheeks and muzzle (presumably this is what Daubenton meant by long ashy gray hair on the cheeks). On a later page (1765, p. 114), Daubenton explained that the tarsus and one of the feet had been dissected "pour faire voir sa conformation singulière," and that the specimen had been given to the Cabinet by Mme. la marquise d'Aligny.

## Buffon's Tarsier in Later Literature

The importance of Buffon's and Daubenton's descriptions (and accompanying figure) is that they were cited as the basis for several binomials over the following years almost until the beginning of the next century, names that are the earliest available for any tarsier with the exception of Simia syrichta Linnaeus 1758, generally regarded as referring to a Philippine tarsier. The earliest of these names is Erxleben's (1777) Lemur tarsier (on which Storr [1780] based a new genus, Tarsius); this was followed 1 year later by von Schreber's (1778) Didelphys? Macrotarsos and by Pallas's (1778) Lemur spectrum. (This last name was based on Buffon's tarsier, but a specimen he had seen in a private museum was also referred to the species.) Link (1795) likewise based the name Macrotarsus buffonii on Buffon's tarsier.

Fig. 1 Plate of the tarsier from Comte de Buffon (1765).


The tarsier reentered French zoology with Vicq-d’Azyr (1792), who evidently regarded it as belonging to a separate genus of primates-Genre Quatrième. Tarsiers, Tarsii-but took the descriptions of the anatomical features entirely from Daubenton and occasionally Buffon; even the only remark he attributed to himself, that the specimen they had described "étoit desséché \& racorni depuis long temps" is actually taken verbatim from Daubenton.

Cuvier and Geoffroy (1795) investigated the relationships of the tarsier, incidentally correcting Daubenton's error in the dental formula, and indicated that they considered the tarsier described by Pallas to be a different species from the one described by Buffon and Daubenton. They affirmed that, as well as the individual described by Daubenton, they had now seen another tarsier, "conservé dans la liqueur," because "graces aux pénibles travaux des savans Thouin et Faujas, la collection stadhouderienne est réunie à celle du Muséum d'histoire naturelle." This in fact glossed over a somewhat disreputable episode of French intellectual history: the army of the French Republic, in 1794-1795, invading the Netherlands in support
of the Dutch Patriot movement, abolished the position of Stadhouder, and confiscated the natural history collection of the last Stadhouder, Prince William V of Orange, which was carefully transported to Paris by André Thouin and Barthélémy Faujas de Saint-Fond (Burkhardt 2007).

The following year, Geoffroy (1796) listed the genera and species that he regarded as "makis" (more or less, lemurs), his Genus 5 being "Tarsier" (sic), with 2 species, which he distinguished by their incisor teeth: Tarsius pallasii (for the specimen described by Pallas [1778] and ascribed to his Lemur spectrum) and $T$. daubentonii (for the tarsier described by Daubenton and Buffon).

One year later again, Audebert (1797) published a description and painting of the Buffon/Daubenton tarsier that he called Tarsius daubentonii (Fig. 2). Somewhat idealized, it has a rounder head and shorter snout than depicted in the de Sève illustration, but is recognizable by its bodily posture, the far-side arm and leg being raised for climbing (and it has been given a wooden support), the near-side ones being lowered. The tail is no longer curled around the body, but is now below it.

Fischer (1804) again referred the Buffon/Daubenton specimen to T.daubentonii ("der Tarser [sic] Daubentons"), distinguishing this species not only from Tarsius pallassii ("der Tarser des Pallas") but also from a new species, T. fuscus, s.

Fig. 2 Le Tarsier, from Audebert (1797).

fuscomanus ("der braune Tarser, oder der Tarser mit braunen Händen"), the latter based on a specimen from Macassar in his own collection. He stated of the Buffon/ Daubenton specimen simply that "Das Skelet sowohl als das ausgestopfte Exemplar findet sich im Pariser Museum" (the skeleton as well as the stuffed specimen are to be found in the Paris Museum), and he had obviously seen them, because he referred to not only Audebert's picture, but also an unpublished one by Maréchal in the museum's Vélins. Moreover he illustrated (with his own drawings, in his Plate VI) what he said was the skeleton of Daubenton's tarsier, in which were included the skull, vertebral column and ribcage, the left humerus, and part (?) of the right, the pelvis, and bones of the left foot (Fig. 3). The skull is rendered so unrealistically that we wonder whether it was drawn from an actual specimen; but the other bones are well delineated.

In 1812, Etienne Geoffroy Saint-Hilaire, as he was now calling himself, listed only 2 species in the genus Tarsius, now uniting the Buffon and Pallas tarsiers as $T$. spectrum, the second species being Fischer's T. fuscomanus. For the Fischer species he used the vernacular name "Tarsier aux mains brunes," following Fischer himself, and he distinguished T. spectrum as "Tarsier aux mains rousses," though in the description he differentiated them by the color not merely of their hands but of the whole pelage: "brun-clair" vs. "roux." The new vernacular is somewhat perplexing, as neither red hands nor red pelage in general had previously been mentioned as characteristic of Buffon's tarsier, whether in Buffon's, Daubenton's, Audebert's, Fischer's, or any other description, nor are red hands depicted in Audebert's painting, nor is the tarsier painted an especially red color. Apart from their different colors, Geoffroy also distinguished his 2 species by their ears: in Tarsius spectrum "oreilles de moitié longues que la tête," but in T. fuscomanus "oreilles deux tiers de la longueur de la tête," the latter description probably based on the grotesquely large ears of what passes for a tarsier in Plate 3 of Fischer (1804).

The scientific and vernacular nomenclatures of Geoffroy Saint-Hilaire (1812) were used again by Desmarest (1819), who likewise did not mention any red color, but did add one new item: "Le mâle a les parties de la génération d'un volume remarquable, relativement à la petite taille," and indeed, this feature is shown in his Plate 31, Fig. 1 (here, Fig. 4), in which a tarsier is depicted in much the same posture as that in Buffon's and Audebert's plates, with the following apparent differences:

- It is the opposite way around (though this could simply be a printer's error; the Buffon plate was printed sometimes facing one way, sometimes facing the other, in different editions).
- The head appears to be facing more downward.
- The ears are enormously long, more than in any other tarsier depiction.
- The body is more twisted round relative to the head and arms, showing the "remarkable" size of the male genitalia, and the far-side hind leg is less lifted up.
- The tail is more or less trailing on the ground.

In short, what is depicted appears to be a different specimen from the one portrayed by de Sève (in Buffon) and by Audebert. Desmarest (1819, p. 476) states: "L' individu que possèdent les galeries du Muséum d'Histoire naturelle de Paris provient de la collection du Stathouder. Celui qui est en squelette dans le cabinet d' anatomie comparée est le même que Daubenton a décrit." It would appear, therefore,




Fig. 3 Skeletal parts of Daubenton's tarsier from Fischer (1804, plate 6).
that the specimen depicted is the Stathouder's specimen, perhaps now extracted from its liquor, and Desmarest agreed with Fischer about the identity of the skeleton.

The last important listing of specimens in the Paris Museum is that by Isidore Geoffroy Saint-Hilaire (1851), who cited only a single species as being well known: Tarsius spectrum. He listed (p. 84) just 2 specimens in the collection: a male, "No. 83 de l'ancien Catalogue... Provenant de la collection du Stathouder," and a specimen of unknown sex, "Conserve dans l'alcool... Donné par M.Temminck à M.

Fig. 4 Tarsier de Daubenton, from Desmarest (1819, plate 31).


Cuvier." But he added that he had been able, in 1851, to add to the collections thanks to his colleague M. Duvernoy.

One is left with a sense of confusion. Which specimen was really the one from the Stathouder's collection: one in alcohol, as stated by the Cuvier and the elder Geoffroy Saint-Hilaire in 1795; or a mounted one, as stated by Desmarest 24 yr later; or a specimen in indeterminate condition, as stated by the younger Geoffroy SaintHilaire 32 years after that? What is this other (?) specimen in alcohol supposedly given by Temminck, director of the Leiden Museum in the Netherlands, to Cuvier? What, meantime, had become of the Buffon/Daubenton specimen: Was it really now represented only by a skeleton?

## Presumed Specimens of Buffon's Tarsier in the Paris Museum

The Paris Museum possesses a partial skeleton, A. 3948, labeled "Tarsier aux mains rousses, Tarsius spectrum, E. G., squelette décrit par Daubenton dans l'Histoire Naturelle de Buffon. La queue manqué." It consists of vertebrae and the ribcage, both femora and tibiae, the right humerus, ulna, radius and scapula, the pelvis, both feet (the right foot partially disarticulated), and sundry hand bones (Fig. 5). Presumably it is thought to be the specimen illustrated in Fischer's plate VI, and it may be, provided we assume that Fischer did not depict all of the bones, but there are other differences, as follows:

- No skull is present.
- The sternum and the ribs are now separated from the vertebral column.
- Only one humerus is now present.


Fig. 5 A-3948, the skeleton said to be that described by Daubenton.

- The pubis of the right innominate is missing.
- Both foot skeletons are held together by desiccated tissue, whereas the foot bones in Fischer's plate are separated.

Though it is possible that Fischer used some license, this last point does seem rather telling, and we must suspend judgement over whether this skeleton really is the one "described" by Daubenton.

However, much more significant is the presence in the Museum of a mounted specimen, CG 1994-2465 (Fig. 6). This specimen is mounted on a "tree" (but a different one from those depicted in either Buffon or Audebert), but in exactly the same posture, the far-side limbs reaching upward as if climbing, the near-side limbs lowered. Here, we compare this specimen with the plates in Buffon (Fig. 7) and Audebert (Fig. 8). Given a little artistic license, and the probable effects of remounting, the similarities are too striking to ignore:

1) The ears in CG 1994-2465 are torn, giving a superficial impression of being pointed, as in the de Sève plate in Buffon. Evidently Audebert must have realized this, and "cleaned up" the ears. However, it must be admitted that the ears in Desmarest's (1819) specimen also appear pointed, and this part of the ear is of course very fragile; perhaps it was broken later?
2) The facial pattern takes the appearance of a short-haired facial disk, sharply set off from longer-haired forehead and cheeks. Again, Audebert appears to have cleaned up his depiction. It is difficult to tell whether the plate in Desmarest (1819) has the same pattern, as the head is turned downward and is somewhat in shadow.
3) The tail in CG 1994-2465 is looped around the nearside leg, as in the Buffon plate, but round the foot, not - as in the Buffon plate-round the thigh. In the Audebert and Desmarest plates it is not looped around a limb, but extends below the foot of the nearside leg; in the Desmarest plate it is resting on the ground, but in the Audebert plate, where the subject is supposed to be climbing above

Fig. 6 The tarsier described by Buffon, CG 1994-2465.

the ground, hanging unsupported. Close inspection of the left thigh of CG 1994-2465 reveals a small but definite hole, as for a nail; we suppose that the tail had been held in place here by such a nail and, when the tail is held in this position, it does indeed loop around the left thigh and looks exactly like that in the Buffon plate.

There are two possibilities:
a. CG 1994-2465 may be the Stathouder's specimen. This would more or less require that it is the same specimen depicted in the Nouveau Dictionnaire d'Histoire Naturelle in 1819, as indeed is implied by Desmarest's statement on p. 476 of his article. Equally, 1 of only 2 specimens mentioned by Isidore


Fig. 7 CG 1994-2465 (left, center), in similar orientations to the Buffon plate (reversed, right).

Geoffroy Saint-Hilaire (1851) as being in the collection at that time is stated definitely to be the Stathouder's. However, the Stathouder's tarsier was stated by Cuvier and Geoffroy (1795) to be, at that time, in liquor.

- It is of course possible that the specimen was extracted from its liquor and mounted in a pose exactly like that in the Buffon plate, in time to be painted by Audebert 2 yr later and engraved for the Nouveau Dictionnaire d'Histoire Naturelle 24 yr later.


Fig. 8 CG 1994-2465 (left), in similar orientation to the Audebert plate (right).

Fig. 9 (a) Close-up of CG 1994-2465, to show the torn ears, apparently mistaken by the artist of (b) Buffon's plate (reversed) for pointed ears.


- If the specimen in alcohol listed by Isidore Geoffroy Saint-Hilaire (1851), as having been given by Temminck to Cuvier, is actually the Stathouder's specimen, then somehow the labels would have been mixed up. This would be less surprising in MNHN than the first hypothesis detailed above.

Such mixes were rather rare in zoology, owing to the small number of specimens involved at that time, but more frequent in comparative anatomy. Because of the limited technical capacities in the first quarter of the19th century, mounting specimens after a stay in alcohol was very rare. Taxidermists at this time preferred dried skins, even dried with salt.
b. That is the specimen depicted in Buffon and described by him and Daubenton. The specimen still existed in 1795, when it was examined by Cuvier and Geoffroy. The tarsier depicted by Audebert (1797) is in the same posture,


Fig. 10 Inscription on the underside of the mount of CG 1994-2465.
and it is obviously an attempt to make the individual more lifelike. Fischer (1804) said that he examined it, and affirmed that it was the one depicted by Audebert. The posture of CG 1994-2465 is exactly the same as that in Buffon and Audebert, with the exception of the tail, but our observation of an evident nail-hole not only explains why the tail posture is different, but is also positive evidence in favor of an originally different posture for the tail.

Figure 7 shows 1994-2465, as closely as possible, in the same orientation as in the Buffon plate, and Fig. 8 shows it oriented as in the Audebert plate. Figure 9 gives close-ups of the faces of 1994-2465 and the Buffon tarsier, to show the similarity of the facial pattern.

In Fig. 10a, we show the inscriptions on the underside of the base of the specimen. The modern text (upside down in our photo) was obviously written under the assumption that it was the Stathouder's tarsier, but there is also what appears to be a much older label (Fig. 10b). Though largely destroyed by silverfish, we can make out a few phrases as follows:
> [...] provien[...] Des collections Ho[llan]daises, [...] et [...] squelette [...] celui d'après lequel Daubenton [... pub]lié la description de cet individu.

The label seems to be sending mixed messages: that it is from a Dutch collection (that of the Stathouder? or from the Leiden Museum, gift of Temminck?), and that it is the one described by Daubenton.

Figure 11 shows an x-ray film of the specimen. Though largely held together by a wire frame, part of the skeleton is inside: we can make out the outlines of the skull (only the rostrum is clearly present), most caudal vertebrae, the bones of both arms except for the humeri, and the legs. The implication of the discovery that at least some of the skeleton is inside is that the partial skeleton A-3498 cannot be the same individual, and we have already noted that the latter has differences from the bones depicted by Fischer

Fig. 11 X-ray film of CG 1994-2465.

(1804). Daubenton (in Buffon and Daubenton 1765, p. 114) had stated that he had dissected one of the feet of the specimen available to him and Buffon, but not that he had removed the bones; the possibility exists, presumably, that Fischer had studied and drawn them in situ. At this distance in time, we can only consider probabilities.

## Conclusions

We would like to be able to state with complete certainty that specimen 1994-2465 is Buffon's tarsier, but we are unable to exclude fully the possibility that it is the

Stathouder's specimen. If it is the Buffon/Daubenton specimen, then the skeleton A. 3948, reputed to be from that specimen, is not; certain inconsistencies between A. 3948 and Fischer's plate suggest that they are not the same, but then parts of the foot skeleton available to Fischer, and stated by him to be of the Buffon/Daubenton tarsier, can still be seen in 1994-2465, and would have to have been replaced in the mounted skin (not impossible). The identity of posture and other features between 1994-2465 and Buffon's and Audebert's plates, and the evidence of alteration in the single feature (tail position) that is not identical, argue that 1994-2465 really is the Buffon tarsier. Inconsistencies in the literature and questions of the relative likelihood of a mixup of labels versus extraction of a specimen from alcohol further cloud the issue. A number of Buffon's specimens are still in the Paris collection, and we believe we have identified another: that we have rediscovered the tarsier described and depicted by Buffon, and so provided zoology with a type specimen of incalculable importance, although the question is not completely closed.

## References

Audebert, J. B. (1797). Histoire naturelle des singes et des makis. Paris: Desray.
Buffon, G. L. L. (1765). Histoire naturelle, Générale et Particulière, Vol 13. Paris: Imprimerie du Roi.
Burkhardt, R. W., Jr. (2007). The leopard in the garden: life in close quarters at the Muséum d'Histoire Naturelle. Isis, 98, 675-694.
Cuvier, G., \& Geoffroy, E. (1795). Mémoire sur les rapports naturels du Tarsier (Didelphis macrotarsus Gm.). Magasin Encyclopédique, 1(3), 147-154.
Desmarest, A. G. (1819). Tarsier. In Nouveau dictionnaire d'histoire naturelle, appliquée aux arts, à l' agriculture, à l'economie rurale et domestique, à la Médecine, etc. (pp. 475-477). Paris: Deterville.
Erxleben, J. C. P. (1777). Systema regni animalis per classes, ordines, genera, species, varietates, cum synonymia et historia animalium. Classis I. Mammalia. Leipzig: Weygand.
Fischer, G. (1804). Anatomie der maki. Frankfurt a.M: Andrea.
Geoffroy, E. (1796). Mémoire sur les naturels des Makis Lemur, L. et description d'une espèce nouvelle de Mammifère. Magasin Encyclopédique, 2(1), 20-50.
Geoffroy Saint-Hilaire, E. (1812). Suite au tableau des quadrumanes. Annales du Muséum d'Histoire Naturelle, Paris, 19, 156-170.
Geoffroy Saint-Hilaire, I. (1851). Catalogue méthodique de la collection des mammifères, de la collection des oiseaux, et des collections annexes. Première partie-mammifères. Catalogue des primates. Paris: Gide \& Baudry.
Link, H. F. (1795). Beyträge zur naturgeschichte, Rostock \& Leipzig, 1974-1801, Bd. I. Stck. 2, pp. $65-$ 66.

Linnaeus, C. (1758). Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis (10th ed.). Stockholm: Laurent Salvius.
Pallas, P. S. (1778). Novae species quadrupedum e glirium ordine cum illustrationibus variis complurium ex hoc ordine animalium. Erlangen: Wolfang Walther.
Storr, G. L. C. (1780). Prodromus methodi mammalium. Tubingen.
Vicq-d’Azyr, F. (1792). Systême anatomique. Quadrupèdes. Encyclopédie méthodique, Vol. 2. Paris: Panckoucke.
von Schreber, J. C. D. (1778). Die säugethiere in abbildungen nach der natur. Leipzig: T. D.Weigel.


[^0]:    C. Groves ( $\boxtimes$ )

    School of Archaeology \& Anthropology, Australian National University, Canberra ACT 0200, Australia
    e-mail: Colin.Groves@anu.edu.au
    C. Callou • J. Cuisin

    Département des Mammifères et Oiseaux, Muséum National d'Histoire Naturelle, Paris, 5 Rue Buffon, Paris 75005, France

