



## The role and impact of *Zootaxa* in mammalogy in its first 20 years

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### Abstract

*Zootaxa* came as a new and innovative publication medium for taxonomy, amidst a scenario of devaluation of this important biological science. After 20 years, it has ascertained itself as one of the main journals in animal taxonomy. However, the contribution of the journal to the taxonomy of Mammalia (mammals), one of the most studied groups of animals with a long-standing, dedicated spectrum of specialized journals (mammalogy), could have been expected as minor. All the current and former editors of the Mammalia section of *Zootaxa* analyzed the relative contribution of the journal to the description of new species of mammals since 2001. We also analyzed the contribution of *Zootaxa* by taxon, geographic origin of taxa, and geographic origin of first authors. The taxonomic methodology of authors in species description is described as well as the temporal trends in publications and publication subjects. We highlight the editors' picks and eventually, the challenges for the future. We found that *Zootaxa* has had a significant contribution to mammalogy, being the second journal (the first being *Journal of Mammalogy*) in terms of number of new species described (76; 10.6% of the new mammalian species described between 2001 and 2020). The majority of the new species were described following an integrative taxonomic approach with at least two sources of data (86%). The analysis of published taxa, their geographic origin, and the country of origin of first authors shows a wide coverage and exhaustive representation, except for the species from the Nearctic. We conclude that *Zootaxa* has likely responded to a repressed demand for an additional taxonomic journal in mammalogy, with as possible appeals the absence of publication fees and an established publication speed. With 246 articles published in the past 20 years, the Mammalia section of *Zootaxa* embraces a large spectrum of systematic subjects going beyond alpha taxonomy. The challenges for the future are to encourage publications of authors from the African continent, still poorly represented, and from the palaeontology community, as the journal has been open to palaeontology since its early days.

## Introduction

The field of taxonomy is one of the most successful and long-lasting scientific endeavors of humankind. We have been naming and classifying plants and animals since the dawn of our species and since Linnaeus's tenth edition of the 1758 *Systema Naturae*, taxonomists have built a robust information system and norms that have provided the means to systematically accumulate knowledge on biodiversity. The science of taxonomy has described nearly 1.8 million species on earth (Catalogue of Life *et al.* 2021). The description rate of new species has likely stabilized at around 2000 per year since the 1960's for marine taxa (Costello *et al.* 2012). Nevertheless, this description rate is largely heterogeneous, both in terms of geography and taxonomy (Bebber *et al.* 2007). For example, modeling of taxonomic effort has indicated constant description rates for bivalves (Edie *et al.* 2017) and mammals (Burgin *et al.* 2018). Those heterogeneities are problematic for key estimations of species richness, which are crucial for conservation and macroecology modeling but also for taxonomic funding policy priorities.

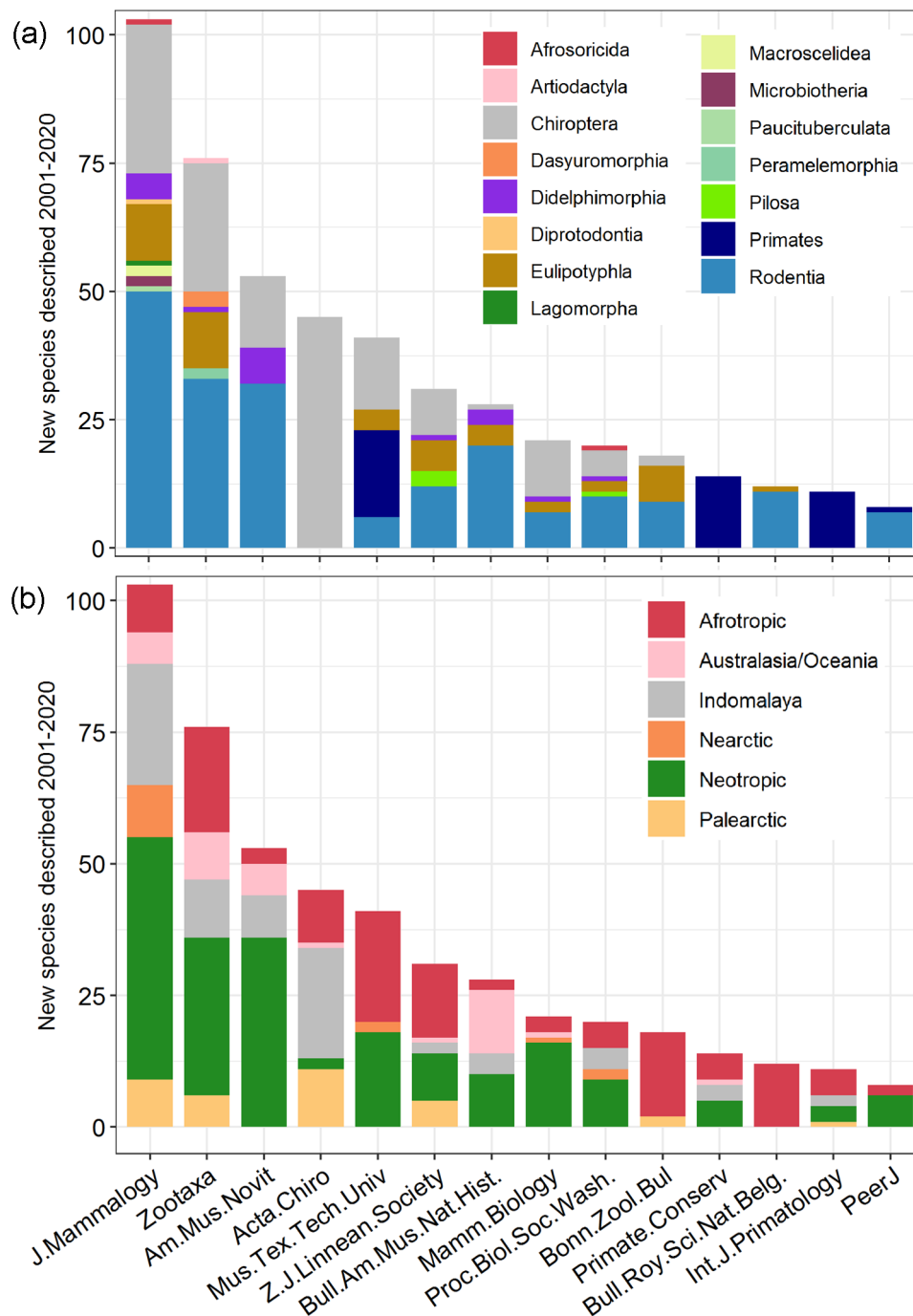
Data generated by taxonomists and conserved in museums, biological, and historical collections are the core of a massively distributed infrastructure of databasing, archiving, and voucher-based information systems. Biodiversity digitization of museums and biological collections already generated 1.6 billion occurrences in GBIF alone (GBIF.org 2021) as well as data for other databases with genetic data as GenBank® ([www.ncbi.nlm.nih.gov/genbank/](http://www.ncbi.nlm.nih.gov/genbank/), Clark *et al.* 2016), the BOLD Database ([www.boldsystems.org/](http://www.boldsystems.org/), Ratnasingham & Hebert, 2007) or morphological data as in MorphoBank ([morphobank.org/index.php](http://morphobank.org/index.php), O'Leary & Kaufman 2012). More recently, those databases have been interconnected, made publicly available, which constituted a revolution in the fields of macroecology (Wüest *et al.* 2020), conservation, biogeography, phylogenetics, phylogeography as well as zoonotic disease studies -just to cite a few- by providing access and data curation, one of the main services provided by collections (Schindel and the Economic Study Group of the Interagency Working Group on Scientific Collections 2020). As a consequence, museums and taxonomists are also at the crossroads of major societal environmental stakes involving climate change, pathogen emergence, landscape use, food security but also the trans-disciplinary education of a new generation of environmental scientists (Bakker *et al.* 2020).

Most of this information has been gathered by a cross-generational constant flux of efforts of thousands of scientists and amateurs around the world. Despite this massive contribution to humankind, taxonomy is often ill-perceived and ill-funded, giving rise to concepts such as the "taxonomic impediment" (Hoagland 1996). Within this context the journal *Zootaxa* was envisioned in 2001, and since then, has become the leading journal of animal taxonomy (Zhang 2006). Embracing all animal taxa, the megajournal has had a positive impact on the number and rate of biodiversity descriptions. It has also had a positive impact on the taxonomic community as a whole, providing a discussion forum and platform to externalize points of views of the taxonomic community (e.g., Nagoya Protocol in Prathapan *et al.* 2018). The share that *Zootaxa* has taken on taxonomy has drawn numerical attention when Clarivate Analytics removed the journal from its Journal Citation report (JCR) listing in 2020, because of an elevated number of self-citations. A unison outcry of revolt among zoologists, as well as the recognition that *Zootaxa* is among one the top journals in zoology under most bibliometric indices and that the issue of higher self-citation mainly arose from the journals' share in taxonomic description, made Clarivate back down and re-include *Zootaxa* on its JCR (Pinto *et al.* 2021).

For most of the taxonomic community, especially the ones with few specialists and scientific societies, the rise of *Zootaxa*, a high throughput and internationally visible journal, came as a relief in areas with often limited number of high visibility journals (Hamilton *et al.* 2021). On the other hand, the contribution of *Zootaxa* did not seem to be guaranteed to the taxonomists of animal taxa with well-established communities, diversified research areas, with many national and transnational scientific societies already managing their own sets of journals. Mammals, for instance, are probably one of the most studied animal classes. The field of mammalogy is especially interesting to analyze the impact of *Zootaxa* since it has a broad range of well-developed research areas with considerable scientific depth, mostly because of our self-interests as humans. Mammalogy has a number of dedicated journals (Anderson & Van Gelder 1970) and an international federation with 23 national scientific societies studying living mammals ([www.internationalmammalogy.org](http://www.internationalmammalogy.org)). Here, we present a numerical, qualitative analysis of the contribution of *Zootaxa* to the field of mammalogy, detail its contribution to the community and highlight some critical points.

## The contribution of new species of mammals in *Zootaxa*

To analyze the contribution of *Zootaxa* relative to other journals in the publication of new species of living mammals, we used the Mammal Diversity Database (Burgin *et al.* 2018). New species were filtered from 2001, the year when *Zootaxa* was first published, to 2020. We identified the journals that published new mammalian species but excluded book chapters and books. We first counted the number of new species described in each journal, then analyzed the geographical distribution of new species by journal and the relative contribution of *Zootaxa* by mammalian order and by biogeographical realm of the described species.



**FIGURE 1.** New species of mammals described between 2001–2020 across journals. Colored bars represent mammalian orders (a) and biogeographic realms (b).

In total, 101 journals published new species of mammals since 2001. This high number is due to the inherent fragmentation of the field of mammalogy as a result of the large ecological spectrum of mammalian species and the vast array of study techniques (e.g., marine mammals, bats, and primates have specific journals). Our analysis shows that new species of mammals draw a heterogeneous interest for publication ranging from new primates and baleen whales published in *Nature* or *Science*, to small mammals described in journals maintained by museums and societies. Journals also vary in scope from traditional centenary journals in the fields of mammalogy and zoology, to high impact journals focused on molecular phylogenetics, ecology, biology, and evolution.

Of the 726 new species of living mammals described between 2001 and 2020, 713 could be allocated to journals. One third of the species (232) were published in three journals: *Journal of Mammalogy* (103), *Zootaxa* (76), and *American Museum Novitates* (53). Eleven other journals contributed to 34% of the new species (249) (Figure 1). The number of mammalian species described in *Zootaxa* corresponds approximately to 10.6% of the mammalian species described since the journal's launch (Figure 1). The species have been described at an average rate of 4.7/yr (stdev. 2.7) from 2005, year of the first new species published in *Zootaxa*, to 2020 (Figure 2). The analysis of the proportion of new species described by mammalian orders does not suggest any taxonomic bias towards a particular order in the new species published in *Zootaxa*, covering seven orders (Figure 1a): Rodentia (33 spp.), Chiroptera (25 spp.), Eulipotyphla (11 spp.), Dasyuromorphia (3 spp.), Peramelemorphia (2 spp.), Didelphimorphia (1 spp.), and Artiodactyla (1 sp.). The *Journal of Mammalogy*, which published new species description in 10 orders, is the most diverse. Similarly, the biogeographical origin of the new species described shows the absence of geographical bias in *Zootaxa* with new species described from five out of six biogeographic realms: Neotropic (30 spp.), Afrotropic (20 spp.) Indomalaya (11 spp.), Australasia/Oceania (9 spp.), and Palearctic (6 spp.) (Figure 1b). The exception is the absence of publications of new species from the Nearctic realm, which have been published mainly in North American journals.

Our analysis based on the proxy of new species descriptions shows that *Zootaxa* has had a significant impact on the field of mammalogy. Interestingly *Zootaxa* seems not to have filled an empty niche in the mammalogy spectrum either of taxa or regions that did not have an adequate outlet. Instead, and most importantly, *Zootaxa* likely came to fill a repressed demand for an additional taxon-based publication medium. The factors that made *Zootaxa* appealing to authors, from our diverse perspectives are mainly the absence of publication fees, an established publication speed, and good bibliometric indices in zoology.

### **Contribution of *Zootaxa* to mammalogy: More than taxonomy**

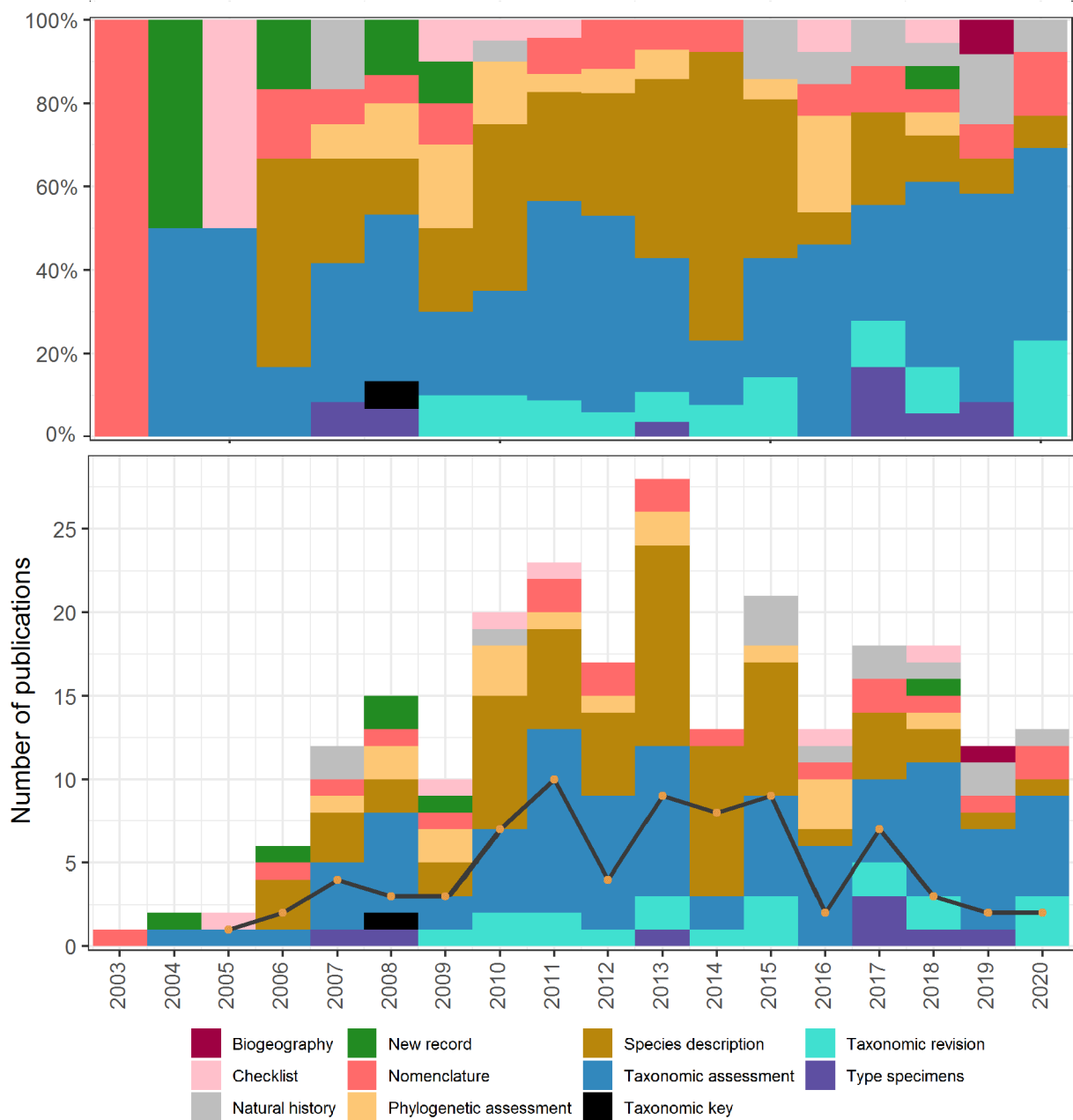
Within the last twenty years 246 articles, 31 (12,6%) of them with open access, addressing mammals were published in *Zootaxa*. The average rejection rate was 48% (2003–2019). Only two years after the first Mammalia publication in *Zootaxa* (Gaubert *et al.* 2003), we observed a clear upward trend in the number of articles, peaking at 28 publications in 2013 (Figure 2). In the last five years, *Zootaxa* has published on average 19 mammal-related articles per year with 16 new species described (2016–2020). Within this range of publications, eight are monographs (min. 61–max. 216 pp.).

The contributions published in *Zootaxa* encompass a wide variety of topics. Within the realms of systematics, publications have ranged from new distribution records and taxonomic assessments to species descriptions, nomenclatural acts, and designation of type material. It has also provided a platform for biogeographic research and for reporting natural history information (Figure 2). Although some species lists and distributional records were published in the earlier years, the Mammalia section of *Zootaxa* is now focusing on manuscripts strictly dealing with systematics, including description of new species, nomenclatural changes, taxonomic revisions, phylogenetics, and phylogeography.

### **Extinct and fossil taxa**

Palaeontology is at the crossroads of a number of geological and biological disciplines, so that a large variety of journals is available to palaeontologists. Although taxonomy represents an integral part of paleontological studies, *Zootaxa* is not receiving enough enthusiastic support from the palaeomammalogist community, when compared to its modern counterpart. As an ancient naturalist discipline, palaeontology is affected by the weight of traditions, and

palaeomammalogists have a long-held tradition of publishing in journals dedicated to vertebrate palaeontology and evolution (e.g., *Palaeontology*, *Journal of Vertebrate Palaeontology*, *Journal of Human Evolution*, *Geodiversitas*), but this should be equally the case for zoologists. Such a lack of interest for a journal specialized in taxonomy is puzzling since the recognition and delimitation of fossil species constitute the core of all palaeontological research. One reason might be that *Zootaxa* is still labelled as a journal made by and for biologists, zoologists in particular, but luckily such prejudice does not seem to be spread across all continents. So far, 22 articles in palaeomammalogy have been published in *Zootaxa*, including the description of 14 new species. In recent years, a vast majority of palaeontological studies published in *Zootaxa* involved South American groups (especially notoungulates, xenarthrans, and marsupials), while a few studies dealt with the (re)description of Asian or North American fossil species. We also observed that only one European (Van der Geer *et al.* 2014) and no African discoveries in palaeomammalogy managed to find their way in the Mammalia section of *Zootaxa*, while those two continents include vibrant palaeontologist communities.

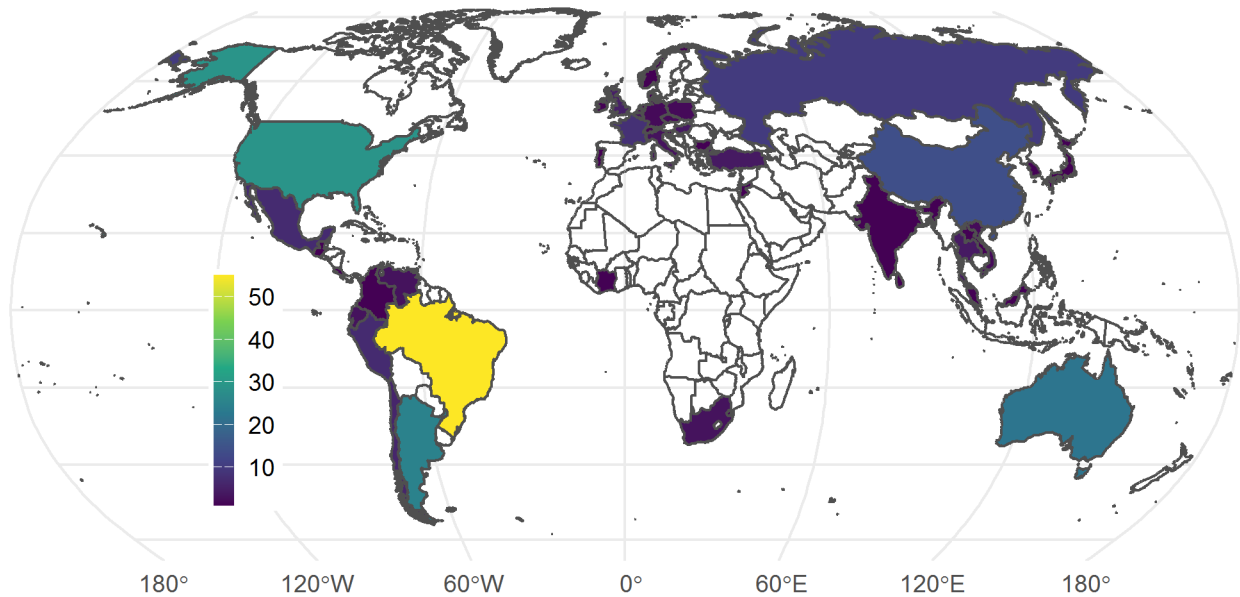


**FIGURE 2.** Temporal trends of articles published in the Mammalia section of *Zootaxa* between 2003 and 2020 by contribution type, as percentage (top) and number of publications (bottom) per year. Black line shows the temporal trend of new species described in *Zootaxa*.

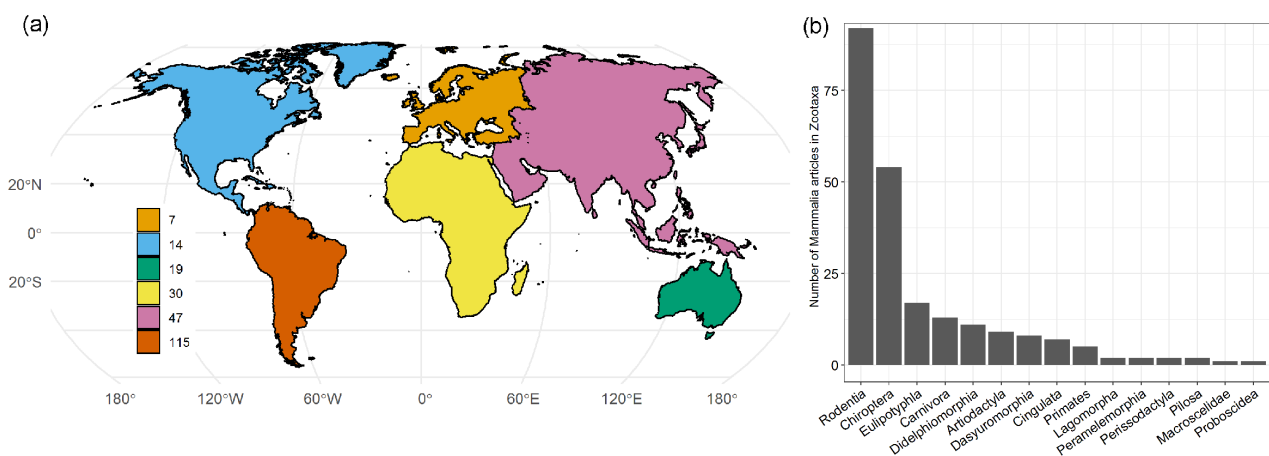


## Origin of authors

For the analysis of authors' country, we included all papers published in *Zootaxa*, not just the new species descriptions. The mapping of the first author's affiliations shows that scholars from 45 countries, including all continents, have published in *Zootaxa* (Figure 3). This suggests, as in the analysis of new species contribution, that *Zootaxa* came to supply a repressed demand for taxonomic studies worldwide. Most papers were published by authors from western hemisphere continents, led by Brazil (22.5%), the United States (11.8%), and Argentina (10.2%). The geographical bias towards the western hemisphere might be due to the regional biodiversity richness, in association with funding availability from national agencies that do not cover publications costs, regional policies oriented towards taxonomy (e.g., Carvalho *et al.* 2007; Rodman & Cody 2003) or the commitment of proactive western mammalogical societies. Moreover, strikingly, African authors are very poorly represented, including only five publications with leading authors from that continent.



**FIGURE 3.** First authors' country affiliations of Mammalia articles published in *Zootaxa* between 2003 and 2020.



**FIGURE 4.** Number of articles published in the Mammalia section of *Zootaxa* between 2003 and 2020 across biogeographic realms (a) and taxonomic orders (b).

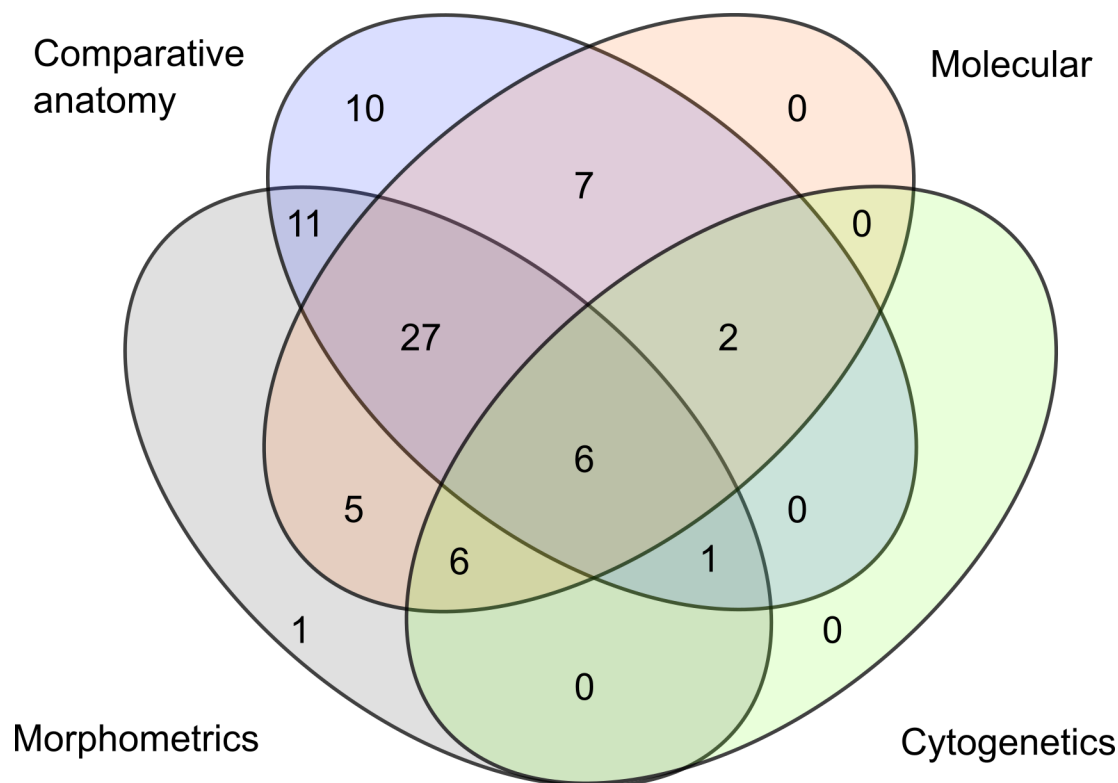
## Target areas and orders of mammals

*Zootaxa* papers have addressed mammalian orders from all continents (Figure 4a). Most of those groups are from South America (49.5%), reflecting the trends in author's affiliations. Nevertheless, Asian and African mammals have

been the focus of 33% of all the papers published in *Zootaxa* in the last twenty years. When exploring the orders of mammals, a clear bias towards small-sized groups is noticeable (Figure 4b); rodent-focused studies accounted for 40.7% of all papers in the last 20 years, followed by bats (23.9%). This bias reflects the global pattern of uneven focus in mammalian taxonomy and higher probability to find new taxa in species-rich groups.

### Sources of data: an integrative practice

Sixty-nine *Zootaxa* studies described 76 new living mammals (see Appendix I), including *Niviventer pianmaensis*, which was described as a subspecies (Li & Yang 2009), and *Conilurus capricornensis*, which was described from cave material but is thought to still be extant (Cramb & Hocknull 2010). The vast majority of studies (Figure 5) employed an integrative approach, with a combination of two or more types of data, including detailed comparative anatomy analyses, especially of cranial, dental, and integumental anatomy, but also bacular (e.g., Goodman *et al.* 2017; Kruskop *et al.* 2019); morphometric multivariate analyses, based mainly on craniometric traditional measurements using principal component and discriminant analyses, but also employing MANOVA (Goodman *et al.* 2015) or using a geometric morphometrics approach (Cucchi *et al.* 2006; Taylor *et al.* 2011); phylogenetic analyses of molecular sequence data, especially cytochrome *b*, but also cytochrome oxidase 1, d-loop, ribosomal 12s and 15s, ND2, and nuclear loci such as IRBP and RAG1; classic cytogenetics, especially for rodents but also used in the description of the vespertilionid bat *Laephotis stanleyi* (Goodman *et al.* 2017); and comparative echolocation analyses for bats (e.g., Reardon *et al.* 2008; Soisook *et al.* 2013, 2015, 2017; Goodman *et al.* 2011, 2015; Puechmaille *et al.* 2014). Other sources of data less commonly employed in species descriptions were allozymes (Reardon *et al.* 2008; Verheyen *et al.* 2011), microsatellites (Puechmaille *et al.* 2014; Ralph *et al.* 2015), and niche modeling (Ralph *et al.* 2015).



**FIGURE 5.** Venn's diagram showing the number of new mammalian species described in *Zootaxa* between 2003 and 2020 based on molecular, morphometric, chromosome and qualitative anatomy data.

The vast majority (86%) of studies describing new species employed at least two or more sources of data (Figure 5), while 13% employed only qualitative morphology, and a single species, *Niviventer pianmaensis*, was described (as a subspecies) based mainly on morphometric data (Li & Yang 2009). Comparative anatomy was employed in 84% of the studies, reinforcing its permanent central role in mammalian taxonomy, while 75% used morphometric

data and 70% analyzed molecular data; chromosome data was used in only 20% of species descriptions. Only 6 new species (8%) were described based on these four main sources of data (Taylor *et al.* 2011; Gonçalves & Oliveira 2014; Quintela *et al.* 2014, 2017), while the most common combinations were molecular, qualitative anatomy and morphometrics (36%) or anatomy and morphometrics (14%). Most molecular studies employed a single mitochondrial marker (cytochrome *b* - only molecular analyses were performed in 34% of studies), and only a few studies used mitochondrial and nuclear multi locus analyses (Velazco & Lim 2014; Rowe *et al.* 2014; Travouillon & Phillips 2018). Interestingly, only two studies performed phylogenetic analysis of morphological data, and no study employed coalescent or species delimitation methods.

## Editors' picks

Soon after it was established, the Mammalia section of *Zootaxa* actively promoted the publication of taxonomic revisions and species descriptions based on an integrative approach, combining morphological, ecological and molecular-based evidence (Figure 5). Most of the publications appearing in the Mammalia section supports the pattern of systematics as a modern, dynamic discipline that associates data obtained from both museum and field surveys. The current and former editors (Table 1) provided a synthesis of articles that highlight the contributions of *Zootaxa* to mammalogy.

**TABLE 1.** Former and current editors of the Mammalia section of *Zootaxa*.

Editors	Period
Janet K. Braun	2002–2007
Geraldine Veron	2003–2007
Philippe Gaubert	2006–2020
Pedro Cordeiro-Estrela	2007–2011
Marcelo Weksler	2011–2017
Paúl M. Velazco	2013–Present
Lionel Hautier	2014–Present
Pierre-Henri Fabre	2017–Present
Pablo Teta	2017–Present
Anderson Feijó	2020–Present

The Mammalia section of *Zootaxa* has contributed to the description of supraspecific taxa such as a new genus of African mole rat (Kock *et al.* 2006), receiving the highest number of citations within the Mammalia section's publications (63). New species have been described from a wide spectrum of habitats and contexts, including an antelope from African bushmeat markets (Colyn *et al.* 2010), a climbing rat from central South America (Rocha *et al.* 2011; fourth best cited article: 43), an aquatic rodent from Indonesia with a unique eco-morphology (Rowe *et al.* 2014), and a rodent from the Atlantic forest (Brazil), one of the most ecologically diverse regions of the world (Gonçalves & Oliveira 2014). The Mammalia section of *Zootaxa* has further contributed to the description of endemic species throughout the world, notably a mouse from Cyprus Island in the Eastern Mediterranean (Cucchi *et al.* 2006; second best cited article: 56) and a sigmodontine rodent from Argentina (Jayat *et al.* 2010; fifth best cited article: 37). Breaching through the integrative best-practice approach, a new murine rodent species from southern Africa (Angola) was described by Carleton *et al.* (2015) on the sole basis of morphological evidence but was recently confirmed by a mitogenomic study (Nicolas *et al.* 2020).

The Mammalia section of *Zootaxa* has also published a large number of nomenclatural clarifications and taxonomic revisions for various groups of species distributed around the world. These include a higher-level mammalian nomenclature notably enlightening the issue of Cetartiodactyla usage (Asher & Helgen 2011), and the revisions of extant Cingulata (Dasypodidae) from South America (Feijó & Cordeiro-Estrela 2016), Neotropical big-eyed phyllostomid bats (Garbino *et al.* 2020), a complex of East African rodents (Murinae; Taylor *et al.* 2011), rodent communities from Southeast Asia (Balakirev *et al.* 2013), and Australian bats of the genus *Pteropus* (Helgen



2004). *Zootaxa* has long been one of the few journals allowing to publish large monographs at no charge for the authors. A marking article of the Mammalia section is the monograph on the mammals of the two Koreas (Jo *et al.* 2018; 216 pp.), a concrete example of how taxonomy can sometimes go beyond political barriers.

Since its early days, the Mammalia section of *Zootaxa* has welcomed submissions on fossil taxa. Representative examples of the fairly large spectrum of publications in the field of palaeontology include the revision of a mammalian ichnogenus (*Ameghinichnus*), known only from its tracks, from the Middle Jurassic of Argentina (De Valais 2009), and the description of new species of emblematic mammals such as Notoungulata and Cingulata from South America (Shockey *et al.* 2016; Moura *et al.* 2019).

The Mammalia section of *Zootaxa* has also contributed to feed the societal debate that is inevitable when tackling the taxonomy of iconic species, notably through the publication of an argued opinion on the taxonomic status -and its legal consequences- of the dingo in Australia (Jackson *et al.* 2017; third best cited article: 48), itself followed by a debate of opinions also published in *Zootaxa* (Jackson *et al.* 2019; Smith *et al.* 2019).

## Conclusion

*Zootaxa* has had a significant contribution to mammalogy, being the second journal in terms of number of new species described (76), which represents 10.6% of the new mammals that have been described since 2001. The majority of the new species were described using an integrative taxonomic approach with at least two sources of data (87%) and without declining sole morphology species delimitations. The analysis of the taxa published, their geographic origin, and the country of origin of first authors show that *Zootaxa* has likely addressed a repressed demand for a taxonomic journal rather than a specific publication niche within the large numbers of journals (101) that published new mammalian species. With 246 articles published in the Mammalia section in the past 20 years, the contribution of *Zootaxa* embraces a large spectrum of systematic studies going beyond taxonomy. The challenges identified to reach a representative coverage of the taxonomic efforts worldwide are to encourage publications from authors from the African continent and from the palaeontology community, too few for the moment.

## Acknowledgments

The former and current editors of *Zootaxa* (Mammalia) would like to thank Zhi-Qiang Zhang for the innovative proposal and positive transformation that *Zootaxa* has brought to taxonomy.

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**APPENDIX I.** New species of Mammals described in *Zootaxa* from 2001 to 2020

Order	Family	Species	Year	Biogeographic Realm	Country Distribution	Reference
RODENTIA	Muridae	<i>Hydromys ziegleri</i>	2005	Australasia/ Oceania	Papua New Guinea	Helgen, K.M. (2005). The amphibious murines of New Guinea (Rodentia, Muridae): the generic status of <i>Baiyankamys</i> and description of a new species of <i>Hydromys</i> . <i>Zootaxa</i> , 913, 1–20.
RODENTIA	Muridae	<i>Mus cypriacus</i>	2006	Palaearctic	Cyprus	Cucchi, T., Orth, A., Auffray, J. C., Renaud, S., Fabre, L., Catalan, J., ... & Vigne, J. D. (2006). A new endemic species of the subgenus <i>Mus</i> (Rodentia, Mammalia) on the Island of Cyprus. <i>Zootaxa</i> , (1241), 1–36.
CHIROPTERA	Vespertilionidae	<i>Eptesicus taddeii</i>	2006	Neotropic	Brazil	Miranda, J. M., Bernardi, I. P., & Passos, F. C. (2006). A new species of <i>Eptesicus</i> (Mammalia: Chiroptera: Vespertilionidae) from the Atlantic forest, Brazil. <i>Zootaxa</i> , 1383(1), 57–68.
RODENTIA	Cricetidae	<i>Juliomys ossitenus</i>	2007	Neotropic	Brazil	Costa, L.P., Pavan, S.E., Leite, Y. L., & Fagundes, V. (2007). A new species of <i>Juliomys</i> (Mammalia: Rodentia: Cricetidae) from the Atlantic forest of southeastern Brazil. <i>Zootaxa</i> , 1463(1), 21–37.
EULIPOTYPHILA	Soricidae	<i>Crocidura sokolovi</i>	2007	Indomalaya	Vietnam	Jenkins, P.D., Abramov, A.V., Rozhnov, V.V., & Makarova, O.V. (2007). Description of two new species of white-toothed shrews belonging to the genus <i>Crocidura</i> (Soricomorpha: Soricidae) from Ngoc Linh Mountain, Vietnam. <i>Zootaxa</i> , 1589, 57–68.
EULIPOTYPHILA	Soricidae	<i>Crocidura zaitsevi</i>	2007	Indomalaya	Vietnam	Jenkins, P. D., Abramov, A. V., Rozhnov, V. V., & Makarova, O. V. (2007). Description of two new species of white-toothed shrews belonging to the genus <i>Crocidura</i> (Soricomorpha: Soricidae) from Ngoc Linh Mountain, Vietnam. <i>Zootaxa</i> , 1589, 57–68.

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**APPENDIX I. (Continued)**

<b>Order</b>	<b>Family</b>	<b>Species</b>	<b>Year</b>	<b>Biogeographic Realm</b>	<b>Country Distribution</b>	<b>Reference</b>
EULIPTYPHLA	Soricidae	<i>Crocidura hikmiya</i>	2007	Palaearctic	Sri Lanka	Meegaskumbura, S., Meegaskumbura, M., Pethiyagoda, R., Manamendra-Arachchi, K., & Schneider, C. J. (2007). <i>Crocidura hikmiya</i> , a new shrew (Mammalia: Soricomorpha: Soricidae) from Sri Lanka. <i>Zootaxa</i> , 1665(1), 19–30.
RODENTIA	Cricetidae	<i>Oxymycterus wayku</i>	2008	Neotropic	Argentina	Jayat, J. P., D'Elia, G., Pardiñas, U. F., Miotti, M. D., & Ortiz, P. E. (2008). A new species of the genus <i>Oxymycterus</i> (Mammalia: Rodentia: Cricetidae) from the vanishing Yungas of Argentina. <i>Zootaxa</i> , 1911(1), 31–51.
RODENTIA	Cricetidae	<i>Eligmodontia bolsonensis</i>	2008	Neotropic	Argentina	Mares, M. A., Braun, J. K., Coyner, B. S., & Van Den Bussche, R. A. (2008). Phylogenetic and biogeographic relationships of gerbil mice <i>Eligmodontia</i> (Rodentia, Cricetidae) in South America, with a description of a new species. <i>Zootaxa</i> , 1753(1), 1–33.
CHIROPTERA	Molossidae	<i>Setirostris eleryi</i>	2008	Australasia/Oceania	Australia	Reardon, T., Adams, M., McKenzie, N., & Jenkins, P. (2008). A new species of Australian freetail bat <i>Mormopterus eleryi</i> sp. nov. (Chiroptera: Molossidae) and a taxonomic reappraisal of <i>M. norfolkensis</i> (Gray). <i>Zootaxa</i> , 1875(1), 1–31.
RODENTIA	Chinchillidae	<i>Lagidium aluacaense</i>	2009	Neotropic	Ecuador	Ledesma, K., Werner, F., Spotorno, A., & Albuja Viteri, L. H. (2009). A new species of mountain viscacha (Chinchillidae: <i>Lagidium</i> Meyen) from the Ecuadorian Andes. <i>Zootaxa</i> , 2126, 41–57.
RODENTIA	Cricetidae	<i>Abrawayomys chebezi</i>	2009	Neotropic	Argentina	Pardiñas, U.F., Teta, P., & D'Elia, G. (2009). Taxonomy and distribution of <i>Abrawayomys</i> (Rodentia: Cricetidae), an Atlantic Forest endemic with the description of a new species. <i>Zootaxa</i> , 2128(1), 39–60.

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APPENDIX I. (Continued)

Order	Family	Species	Year	Biogeographic Realm	Country Distribution	Reference
RODENTIA	Muridae	<i>Niviventer pianmaensis</i>	2009	Indomalaya	China	Li, S., & Yang, J. (2009). Geographic variation of the Anderson's <i>Niviventer (Niviventer andersoni)</i> (Thomas, 1911) (Rodentia: Muridae) of two new subspecies in China verified with cranial morphometric variables and pelage characteristics. <i>Zootaxa</i> , 2196(1), 48–58.
RODENTIA	Cricetidae	<i>Calomys cerqueirai</i>	2010	Neotropic	Brazil	Bonvicino, C.R., de Oliveira, J.A., & Gentile, R. (2010). A new species of <i>Calomys</i> (Rodentia: Sigmodontinae) from eastern Brazil. <i>Zootaxa</i> , 2336(1), 19–35.
ARTIODACTYLA	Bovidae	<i>Philantomba walteri</i>	2010	Afrotropic	Ghana? Togo Benin Nigeria	Colyn, M., Hulselmans, J., Sonet, G., Oude, P., De Winter, J., Natta, A., ... & Verheyen, E. (2010). Discovery of a new duiker species (Bovidae: Cephalophinae) from the Dahomey Gap, West Africa. <i>Zootaxa</i> , 2637(1), 1–30.
RODENTIA	Muridae	<i>Conilurus capricornensis</i>	2010	Australasia/ Oceania	Australia	Cramb, J., & Hocknull, S. (2010). New Quaternary records of <i>Conilurus</i> (Rodentia: Muridae) from eastern and northern Australia with the description of a new species. <i>Zootaxa</i> , 2634(1), 41–56.
CHIROPTERA	Molossidae	<i>Chaerephon atsinanana</i>	2010	Afrotropic	Madagascar	Goodman, S.M., Buccas, W., Naidoo, T., Ratrimomanarivo, F., Taylor, P.J., & Lamb, J. (2010). Patterns of morphological and genetic variation in western Indian Ocean members of the Chaerephon 'pumilus' complex (Chiroptera: Molossidae), with the description of a new species from Madagascar. <i>Zootaxa</i> , 2551(1), 1–36.
RODENTIA	Cricetidae	<i>Akodon polopi</i>	2010	Neotropic	Argentina	Jayat, J.P., Oritz, P.E., Salazar-Bravo, J., Pardiñas, U.F.J. and d'Elia, G. 2010. The <i>Akodon boliviensis</i> species group (Rodentia: Cricetidae: Sigmodontinae) in Argentina: species limits and distribution, with description of a new entity. <i>Zootaxa</i> , 2409, 1–61.

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**APPENDIX I.** (Continued)

Order	Family	Species	Year	Biogeographic Realm	Country Distribution	Reference
EULIPTYPHLA	Soricidae	<i>Crocidura phanluongi</i>	2010	Indomalaya	Cambodia Vietnam	Jenkins, P.D., Abramov, A.V., Rozhnov, V.V. and Olsson, A. (2010). A new species of <i>Crocidura</i> (Soricomorpha: Soricidae) from southern Vietnam and north-eastern Cambodia. <i>Zootaxa</i> , 2345, 60–68.
RODENTIA	Muridae	<i>Hylomyscus pamfi</i>	2010	Afrotropic	Togo Benin Nigeria Ghana?	Nicolas, V., Olayemi, A., Wendelen, W., & Colyn, M. (2010). Mitochondrial DNA and morphometrical identification of a new species of <i>Hylomyscus</i> (Rodentia: Muridae) from West Africa. <i>Zootaxa</i> , 2579(1), 30–44.
CHIROPTERA	Vespertilionidae	<i>Glischropus bucephalus</i>	2011	Indomalaya	Myanmar Thailand Laos Vietnam Cambodia	Csorba, G. (2011). A new species of <i>Glischropus</i> from the Indochinese Subregion (Mammalia: Chiroptera: Vespertilionidae). <i>Zootaxa</i> , 2925(1), 41–48.
RODENTIA	Bathyergidae	<i>Fukomys ilariae</i>	2011	Afrotropic	Somalia	Gippoliti, S. & Amori, G. 2011. A new species of mole-rat (Rodentia, Bathyergidae) from the Horn of Africa. <i>Zootaxa</i> , 2918, 39–46.
CHIROPTERA	Miniopteridae	<i>Miniopterus egeri</i>	2011	Afrotropic	Madagascar	Goodman, S.M., Ramasindrazana, B., Maminirina, C. P., Schoeman, M.C., & Appleton, B. (2011). Morphological, bioacoustical, and genetic variation in <i>Miniopterus</i> bats from eastern Madagascar, with the description of a new species. <i>Zootaxa</i> , 2880(1), 1–19.
CHIROPTERA	Phyllostomidae	<i>Sturnira perla</i>	2011	Neotropic	Ecuador Colombia?	Roca, Q. (2011). A new species of <i>Sturnira</i> (Chiroptera: Phyllostomidae) from the Choco forest of Ecuador. <i>Zootaxa</i> , 2755, 1–35.
RODENTIA	Cricetidae	<i>Rhipidomys ipukensis</i>	2011	Neotropic	Brazil	Rocha, R.G., Ferreira, E., Costa, B., Martins, I., Leite, Y.L., Costa, L.P., & Fonseca, C. (2011). Small mammals of the mid-Araguaia River in central Brazil, with the description of a new species of climbing rat. <i>Zootaxa</i> , 2789(1), 1–34.

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APPENDIX I. (Continued)

Order	Family	Species	Year	Biogeographic Realm	Country Distribution	Reference
RODENTIA	Muridae	<i>Otomys cheesmani</i>	2011	Afrotropic	Ethiopia	Taylor, P.J., Lavrenchenko, L.A., Carleton, M.D., Verheyen, E., Bennett, N.C., Oosthuisen, C.J. & Maree, S. (2011). Specific limits and emerging diversity patterns in East African populations of laminate-toothed rats, genus <i>Otomys</i> (Muridae: Murinae: Otomyini): Revision of the <i>Otomys typus</i> complex. <i>Zootaxa</i> , 3024, 1–66.
RODENTIA	Muridae	<i>Otomys simiensis</i>	2011	Afrotropic	Ethiopia	Taylor, P.J., Lavrenchenko, L.A., Carleton, M.D., Verheyen, E., Bennett, N.C., Oosthuisen, C.J. & Maree, S. (2011). Specific limits and emerging diversity patterns in East African populations of laminate-toothed rats, genus <i>Otomys</i> (Muridae: Murinae: Otomyini): Revision of the <i>Otomys typus</i> complex. <i>Zootaxa</i> , 3024, 1–66
RODENTIA	Muridae	<i>Otomys yaldeni</i>	2011	Afrotropic	Ethiopia	Taylor, P.J., Lavrenchenko, L.A., Carleton, M.D., Verheyen, E., Bennett, N.C., Oosthuisen, C.J. & Maree, S. (2011). Specific limits and emerging diversity patterns in East African populations of laminate-toothed rats, genus <i>Otomys</i> (Muridae: Murinae: Otomyini): Revision of the <i>Otomys typus</i> complex. <i>Zootaxa</i> , 3024, 1–66
RODENTIA	Muridae	<i>Acomys muzei</i>	2011	Afrotropic	Tanzania Democratic Republic of the Congo	Verheyen, W., Hulselmans, J., Wendelen, W., Leirs, H., & Corti, M. (2011). Contribution to the systematics and zoogeography of the East-African <i>Acomys</i> . <i>Zootaxa</i> , 3059, 1–35.
RODENTIA	Muridae	<i>Acomys ngurui</i>	2011	Afrotropic	Tanzania Mozambique?	Verheyen, W., Hulselmans, J., Wendelen, W., Leirs, H., & Corti, M. (2011). Contribution to the systematics and zoogeography of the East-African <i>Acomys</i> . <i>Zootaxa</i> , 3059, 1–35.

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**APPENDIX I.** (Continued)

<b>Order</b>	<b>Family</b>	<b>Species</b>	<b>Year</b>	<b>Biogeographic Realm</b>	<b>Country Distribution</b>	<b>Reference</b>
DASYUROMORPHIA	Dasyuridae	<i>Antechinus mysticus</i>	2012	Australasia/ Oceania	Australia	Baker, A.M., Mutton, T.Y., & Van Dyck, S. (2012). A new dasyurid marsupial from eastern Queensland, Australia: the buff-footed antechinus, <i>Antechinus mysticus</i> sp. nov. (Marsupialia: Dasyuridae). <i>Zootaxa</i> , 3515(1), 1–37.
CHIROPTERA	Vespertilionidae	<i>Laephotis robertsi</i>	2012	Afrotropic	Madagascar	Goodman, S.M., Taylor, P.J., Ratrimomanarivo, F., & Hooper, S. (2012). The genus <i>Neoromicia</i> (Family Vespertilionidae) in Madagascar, with the description of a new species. <i>Zootaxa</i> , 3250(1), 1–25.
RODENTIA	Cricetidae	<i>Neodon linzhiensis</i>	2012	Palaearctic	China	Liu, S.Y., Sun, Z.Y., Liu, Y., Wang, H., Guo, P., & Murphy, R.W. (2012). A new vole from Xizang, China and the molecular phylogeny of the genus <i>Neodon</i> (Cricetidae: Arvicolinae). <i>Zootaxa</i> , 3235(1), 1–22.
EULIPTYPHLA	Soricidae	<i>Cryptotis aroensis</i>	2012	Neotropic	Venezuela	Quiroga-Carmona, M., & Molinari, J. (2012). Description of a new shrew of the genus <i>Cryptotis</i> (Mammalia: Soricomorpha: Soricidae) from the Sierra de Aroa, an isolated mountain range in northwestern Venezuela, with remarks on biogeography and conservation. <i>Zootaxa</i> , 3441(1), 1–20.
DASYUROMORPHIA	Dasyuridae	<i>Antechinus argentus</i>	2013	Australasia/ Oceania	Australia	Baker, A. M., Mutton, T. Y., & Hines, H. B. (2013). A new dasyurid marsupial from Kroombit Tops, south-east Queensland, Australia: the silver-headed antechinus, <i>Antechinus argentus</i> sp. nov. (Marsupialia: Dasyuridae). <i>Zootaxa</i> , 3746(2), 201–239.
CHIROPTERA	Phyllostomidae	<i>Lonchophylla peracchii</i>	2013	Neotropic	Brazil	Dias, D., Esberard, C. E. L., & Moratelli, R. (2013). A new species of <i>Lonchophylla</i> (Chiroptera, Phyllostomidae) from the Atlantic Forest of southeastern Brazil, with comments on <i>L. bokermanni</i> . <i>Zootaxa</i> , 3722(3), 347–360.

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**APPENDIX I. (Continued)**

<b>Order</b>	<b>Family</b>	<b>Species</b>	<b>Year</b>	<b>Biogeographic Realm</b>	<b>Country Distribution</b>	<b>Reference</b>
RODENTIA	Cricetidae	<i>Akodon josemariarguedasi</i>	2013	Neotropic	Peru	Jimenez, C. F., V. Pacheco, and D. Vivas. 2013. An introduction to the systematics of <i>Akodon orophilus</i> Osgood, 1913 (Rodentia: Cricetidae) with the description of a new species. <i>Zootaxa</i> , 3669, 223–42.
CHIROPTERA	Miniopteridae	<i>Miniopterus mossambicus</i>	2013	Afrotropic	Malawi Zambia Zimbabwe  Mozambique Kenya	Monadjem, A., Goodman, S. M., Stanley, W. T., & Appleton, B. (2013). A cryptic new species of <i>Miniopterus</i> from southeastern Africa based on molecular and morphological characters. <i>Zootaxa</i> , 3746 (1), 123–142.
RODENTIA	Erethizontidae	<i>Coendou speratus</i>	2013	Neotropic	Brazil	Pontes, A. R. M., Gadelha, J. R., Melo, E. R. A., De Sa, F. B., Loss, A. C., Caldera Jr, V., Costa, L. P. and Leite, Y. L. R. (2013). A new species of porcupine, genus <i>Coendou</i> (Rodentia: Erethizontidae) from the Atlantic forest of northeastern Brazil. <i>Zootaxa</i> , 3636(3), 421–438.
RODENTIA	Sciuridae	<i>Biswamoyopterus laoensis</i>	2013	Indomalaya	Laos	Sanamxay, D., Douangboubpha, B., Bumrungsi, S., Xayavong, S., Xayaphet, V., Satasook, C., & Bates, P.J. (2013). Rediscovery of <i>Biswamoyopterus</i> (Mammalia: Rodentia: Sciuridae: Pteromyini) in Asia, with the description of a new species from Lao PDR. <i>Zootaxa</i> , 3686(4), 471–481.
CHIROPTERA	Vespertilionidae	<i>Murina balaensis</i>	2013	Indomalaya	Thailand	Soisook, P., Karapan, S., Satasook, C., & Bates, P.J. (2013). A new species of <i>Murina</i> (Mammalia: Chiroptera: Vespertilionidae) from peninsular Thailand. <i>Zootaxa</i> , 3746(4), 567–579.

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Order	Family	Species	Year	Biogeographic Realm	Country Distribution	Reference
RODENTIA	Cricetidae	<i>Eligmodontia dunaris</i>	2013	Neotropic	Chile	Spotorno A.E., Zuleta, C.R., Walker, L.I., Manriquez, G.S., Valladares, P.F., & Marin, J.C. (2013). A small, new gerbil-mouse <i>Eligmodontia</i> (Rodentia: Cricetidae) from dunes at the coasts and deserts of north-central Chile: Molecular, chromosomal, and morphological analyses. <i>Zootaxa</i> , 3683(4), 377–394.
RODENTIA	Bathyergidae	<i>Fukomys vandewoestijneae</i>	2013	Afrotropic	Democratic Republic of the Congo Zambia Angola?	Van Daele, P.A.A.G., Blondé, P., Stjernstedt, R. and Adriaens, D. 2013. A new species of African Mole-rat ( <i>Fukomys</i> , Bathyergidae, Rodentia) from the Zaire-Zambezi Watershed. <i>Zootaxa</i> , 3636(1), 171–189.
DASYUROMORPHIA	Dasyuridae	<i>Antechinus arktos</i>	2014	Australasia/Oceania	Australia	Baker, A.M., Mutton, T.Y., Hines, H.B., & Van Dyck, S. (2014). The black-tailed antechinus, <i>Antechinus arktos</i> sp. nov.: a new species of carnivorous marsupial from montane regions of the Tweed Volcano caldera, eastern Australia. <i>Zootaxa</i> , 3765(2), 101–133.
CHIROPTERA	Vespertilionidae	<i>Hypsugo dolichodon</i>	2014	Indomalaya	Myanmar Cambodia Laos Vietnam	Görföl, T.; Csorba, G.; Eger, J. L.; Francis, C. M. (2014). Canines make the difference: a new species of <i>Hypsugo</i> (Chiroptera: Vespertilionidae) from Laos and Vietnam. <i>Zootaxa</i> , 3887(2), 239–250.
RODENTIA	Cricetidae	<i>Delomys altimontanus</i>	2014	Neotropic	Brazil	Goncalves, P.R., & Oliveira, J.A. (2014). An integrative appraisal of the diversification in the Atlantic forest genus <i>Delomys</i> (Rodentia: Cricetidae: Sigmodontinae) with the description of a new species. <i>Zootaxa</i> , 3760(1), 1–38.
CHIROPTERA	Molossidae	<i>Eumops chiribaya</i>	2014	Neotropic	Peru	Medina, C.E., Gregorin, R., Zeballos, H., Zamora, H.T., & Moras, L.M. (2014). A new species of <i>Eumops</i> (Chiroptera: Molossidae) from southwestern Peru. <i>Zootaxa</i> , 3878(1), 19–36.

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Order	Family	Species	Year	Biogeographic Realm	Country Distribution	Reference
CHIROPTERA	Miniopteridae	<i>Miniopterus maghrebensis</i>	2014	Afrotropic	Morocco Algeria Tunisia	Puechmaile, S.J., Allegrini, B., Benda, P., Gürün, K., Srámek, J., Ibañez, C., ... & Bilgin, R. (2014). A new species of the <i>Miniopterus schreibersii</i> species complex (Chiroptera: Miniopteridae) from the Maghreb Region, North Africa. <i>Zootaxa</i> , 3794(1), 108–124.
RODENTIA	Cricetidae	<i>Scapteromys meridionalis</i>	2014	Neotropic	Brazil	Quintela, F.M., Gonçalves, G.L., Althoff, S.L., Sbalqueiro, I.J., Oliveira, L.F.B., & Freitas, T.R.O. (2014). A new species of swamp rat of the genus <i>Scapteromys</i> Waterhouse, 1837 (Rodentia: Sigmodontinae) endemic to Araucaria angustifolia Forest in Southern Brazil. <i>Zootaxa</i> , 3811(2), 207–225.
RODENTIA	Muridae	<i>Waiomys mamasae</i>	2014	Australasia/Oceania	Indonesia	Rowe, K. C., Achmadi, A. S., & Esselstyn, J. A. (2014). Convergent evolution of aquatic foraging in a new genus and species (Rodentia: Muridae) from Sulawesi Island, Indonesia. <i>Zootaxa</i> , 3815(4), 541–564.
CHIROPTERA	Phyllostomidae	<i>Platyrrhinus guianensis</i>	2014	Neotropic	Guyana Suriname	Vélazco, P.M., & Lim, B.K. (2014). A new species of broad-nosed bat <i>Platyrrhinus</i> Saussure, 1860 (Chiroptera: Phyllostomidae) from the Guianan Shield. <i>Zootaxa</i> , 3796(1), 175–193.
RODENTIA	Muridae	<i>Hylomyscus heinrichorum</i>	2015	Afrotropic	Angola	Carleton, M.D., Banasiak, R.A., & Stanley, W.T. (2014). A new species of the rodent genus <i>Hylomyscus</i> from Angola, with a distributional summary of the <i>H. anselli</i> species group (Muridae: Murinae: Praomyini). <i>Zootaxa</i> , 4040(2), 101–128.
CHIROPTERA	Vespertilionidae	<i>Glischropus aquilus</i>	2015	Indomalaya	Indonesia	Csorba, G., Görföl, T., Wiantoro, S., Kingston, T., & Bates, P. J. (2015). Thumb-pads up - a new species of thick-thumbed bat from Sumatra (Chiroptera: Vespertilionidae: Glischropus). <i>Zootaxa</i> , 3980(2), 267–278.

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Order	Family	Species	Year	Biogeographic Realm	Country Distribution	Reference
CHIROPTERA	Vespertilionidae	<i>Histiotus diaphanopterus</i>	2015	Neotropic	Brazil Bolivia	Fejjo, A., Da Rocha, P.A., & Althoff, S. L. (2014). New species of <i>Histiotus</i> (Chiroptera: Vespertilionidae) from northeastern Brazil. <i>Zootaxa</i> , 4048(3), 412–427.
CHIROPTERA	Miniopteridae	<i>Miniopterus ambohitrensis</i>	2015	Afrotropic	Madagascar	Goodman, S.M., Ramasindrazana, B., Naughton, K.M., & Appleton, B. (2015). Description of a new species of the <i>Miniopterus aelleni</i> group (Chiroptera: Miniopteridae) from upland areas of central and northern Madagascar. <i>Zootaxa</i> , 3936(4), 538–58.
CHIROPTERA	Molossidae	<i>Otomops harrisoni</i>	2015	Afrotropic	Eritrea Djibouti Ethiopia Uganda Rwanda Kenya Yemen	Ralph, T.M.C., Richards, L.R., Taylor, P.J., Napier, M.C., Lamb, J.M. 2015. Revision of Afro-Malagasy <i>Otomops</i> (Chiroptera: Molossidae) with the description of a new Afro-Arabian species. <i>Zootaxa</i> 4057 (1), 1–49.
RODENTIA	Cricetidae	<i>Phyllotis occidentens</i>	2015	Neotropic	Peru	Rengifo, E.M., Pacheco, V. 2015. Taxonomic revision of the Andean leaf-eared mouse, <i>Phyllotis andium</i> Thomas 1912 (Rodentia: Cricetidae), with the description of a new species. <i>Zootaxa</i> 4018(3), 349–380.
CHIROPTERA	Vespertilionidae	<i>Myotis secundus</i>	2015	Palaearctic	Taiwan	Ruedi, M., Csorba, G., Lin, L.K., & Chou, C.H. (2015). Molecular phylogeny and morphological revision of <i>Myotis</i> bats (Chiroptera: Vespertilionidae) from Taiwan and adjacent China. <i>Zootaxa</i> , 3920(1), 301–342.
CHIROPTERA	Vespertilionidae	<i>Myotis soror</i>	2015	Palaearctic	Taiwan	Ruedi, M., Csorba, G., Lin, L.K., & Chou, C.H. (2015). Molecular phylogeny and morphological revision of <i>Myotis</i> bats (Chiroptera: Vespertilionidae) from Taiwan and adjacent China. <i>Zootaxa</i> , 3920(1), 301–342.
CHIROPTERA	Megadermatidae	<i>Eudiscoderma thongareae</i>	2015	Indomalaya	Thailand Malaysia?	Soisook, P., Prajakijit, A., Karapan, S., Francis, C.M., & Bates, P. J. (2015). A new genus and species of false vampire (Chiroptera: Megadermatidae) from peninsular Thailand. <i>Zootaxa</i> , 3931(4), 528–550.

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Order	Family	Species	Year	Biogeographic Realm	Country Distribution	Reference
EULIPOTYPHILA	Soricidae	<i>Crocidura afework-bebelei</i>	2016	Afrotropic	Ethiopia	Lavrenchenko, L.A., Voyta, L.L., & Hutterer, R. (2016). Diversity of shrews in Ethiopia, with the description of two new species of <i>Crocidura</i> (Mammalia: Lipotyphla: Soricidae). <i>Zootaxa</i> , 4196(1), 38–60.
EULIPOTYPHILA	Soricidae	<i>Crocidura yaldeni</i>	2016	Afrotropic	Ethiopia	Lavrenchenko, L.A., Voyta, L.L., & Hutterer, R. (2016). Diversity of shrews in Ethiopia, with the description of two new species of <i>Crocidura</i> (Mammalia: Lipotyphla: Soricidae). <i>Zootaxa</i> , 4196(1), 38–60.
CHIROPTERA	Vespertilionidae	<i>Laephotis stanleyi</i>	2017	Afrotropic	Zimbabwe South Africa?	Goodman, S.M., Kearney, T., Ratsimbazafy, M.M., & Hassanin, A. (2017). Description of a new species of <i>Neoromicia</i> (Chiroptera: Vespertilionidae) from southern Africa: A name for <i>N. cf. melckorum</i> . <i>Zootaxa</i> , 4236(2), 351–374.
RODENTIA	Cricetidae	<i>Neacomys vargastlosai</i>	2017	Neotropic	Peru Bolivia	Hurtado, N., & Pacheco, V. (2017). Revision of <i>Neacomys spinosus</i> (Thomas, 1882) (Rodentia: Cricetidae) with emphasis on Peruvian populations and the description of a new species. <i>Zootaxa</i> , 4242(3), 401–440.
EULIPOTYPHILA	Soricidae	<i>Sorex madrensis</i>	2017	Neotropic	Guatemala	Matson, J. O., & Ordóñez-Garza, N. (2017). The taxonomic status of Long-tailed shrews (Mammalia: genus <i>Sorex</i> ) from Nuclear Central America. <i>Zootaxa</i> , 4236(3), 461–483.
EULIPOTYPHILA	Soricidae	<i>Sorex mccarthyi</i>	2017	Neotropic	Honduras	Matson, J. O., & Ordóñez-Garza, N. (2017). The taxonomic status of Long-tailed shrews (Mammalia: genus <i>Sorex</i> ) from Nuclear Central America. <i>Zootaxa</i> , 4236(3), 461–483.

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Order	Family	Species	Year	Biogeographic Realm	Country Distribution	Reference
CHIROPTERA	Phyllostomidae	<i>Sturnira adrianae</i>	2017	Neotropic	Colombia Venezuela	Molinari, J., Bustos, X. E., Burneo, S. F., Camacho, M. A., Moreno, S. A., & Fermin, G. (2017). A new polytypic species of yellow-shouldered bats, genus <i>Sturnira</i> (Mammalia: Chiroptera: Phyllostomidae), from the Andean and coastal mountain systems of Venezuela and Colombia. <i>Zootaxa</i> , 4243(1), 75–96.
RODENTIA	Cricetidae	<i>Deltamys araucaria</i>	2017	Neotropic	Brazil	Quintela, F.M., Bertuol, F., Gonzalez, E.M., Cordeiro-Estrela, P., de Freitas, T.R.O., & Goncalves, G.L. (2017). A new species of <i>Deltamys</i> Thomas, 1917 (Rodentia: Cricetidae) endemic to the southern Brazilian Araucaria Forest and notes on the expanded phylogeographic scenario of <i>D. kempi</i> . <i>Zootaxa</i> , 4294(1), 71–92.
CHIROPTERA	Vespertilionidae	<i>Murina hkakaboraziensis</i>	2017	Indomalaya	Myanmar	Soisook, P., Thaw, W.N., Kyaw, M., Oo, S.S.L., Pimsai, A., Suarez-Rubio, M., & Renner, S. C. (2017). A new species of <i>Murina</i> (Chiroptera: Vespertilionidae) from sub-Himalayan forests of northern Myanmar. <i>Zootaxa</i> , 4320(1), 159–172.
RODENTIA	Cricetidae	<i>Oligoryzomys pacheoi</i>	2018	Neotropic	Bolivia Argentina?	Hurtado, N., & D'Elia, G. (2018). A new species of long-tailed mouse, genus <i>Oligoryzomys</i> Bangs, 1900 (Rodentia: Cricetidae), from the Bolivian Yungas. <i>Zootaxa</i> , 4500(3), 341.
PERAMELEMORPHIA	Peramelidae	<i>Perameles papillon</i>	2018	Australasia/ Oceania	Australia	Travouillon, K.J., & Phillips, M.J. (2018). Total evidence analysis of the phylogenetic relationships of bandicoots and bilbies (Marsupialia: Peramelemorphia): reassessment of two species and description of a new species. <i>Zootaxa</i> , 4378(2), 224–256.

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APPENDIX I. (Continued)

Order	Family	Species	Year	Biogeographic Realm	Country Distribution	Reference
EULIPOTYPHILA	Soricidae	<i>Cryptotis evaristoi</i>	2018	Neotropic	Peru	Zeballos, H., Pino, K., Medina, C.E., Pari, A., Chavez, D., Tinoco, N., & Ceballos, G. (2018). A new species of small-eared shrew of the genus <i>Cryptotis</i> (Mammalia Eulipotyphla, Soricidae) from the northernmost Peruvian Andes. <i>Zootaxa</i> , 4377(1), 51–73.
CHIROPTERA	Vespertilionidae	<i>Barbastella pacifica</i>	2019	Palaearctic	Japan	Kruskop, S.V., Kawai, K., & Tiunov, M.P. (2019). Taxonomic status of the barbastelles (Chiroptera: Vespertilionidae: <i>Barbastella</i> ) from the Japanese archipelago and Kunashir Island. <i>Zootaxa</i> , 4567(3), 461–476.
PERAMELEMORPHIA	Chaeropodidae	<i>Chaeropus yirraiji</i>	2019	Australasia/ Oceania	Australia	Travouillon, K.J., Simões, B.F., Miguez, R.P., Brace, S., Brewer, P., Stemmer, D., ... & Louys, J. (2019). Hidden in plain sight: reassessment of the pig-footed bandicoot, <i>Chaeropus ecaudatus</i> (Peramelemorphia, Chaeropodidae), with a description of a new species from central Australia, and use of the fossil record to trace its past distribution. <i>Zootaxa</i> , 4566(1), 1–69.
EULIPOTYPHILA	Soricidae	<i>Sorex cruzi</i>	2020	Neotropic	Honduras	Andino-Madrid, A.J., Colindres, J.E.M., Pérez-Consuegra, S.G., & Matson, J.O. (2020). A new species of long-tailed shrew of the genus <i>Sorex</i> (Eulipotyphla: Soricidae) from Sierra de Omoa, Honduras. <i>Zootaxa</i> , 4806(1), 56–70.
DIDELPHIMORPHIA	Didelphidae	<i>Marmosops marina</i>	2020	Neotropic	Brazil	Ferreira, C., de Oliveira, A.C.M., Lima-Silva, L. G., & Rossi, R. V. (2020). Taxonomic review of the slender mouse opossums of the Parvidens group from Brazil (Didelphimorphia: Didelphidae: <i>Marmosops</i> ), with the description of a new species. <i>Zootaxa</i> , 4890(2), 201–233.