Abundance of small mammals in the Atlantic Forest (ASMAF): a data set for analyzing tropical community patterns

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INTRODUCTION

Local abundance is a result of the interaction between population and environmental processes (Brown 1984). Whether a population will grow or decline depends on the life-history traits, species ecological requirements, the interactions with other species, and the environment. Species abundances in a community are also one of the most basic descriptors of its structure (Magurran 2004). Throughout the history of community ecology, species abundance distribution (SAD) gave origin to many community models, both empirical (Fisher et al. 1943, Preston 1948, 1962a) and mechanistic (MacArthur 1957, King 1964, Sugihara 1980, Hubbell 2001, He 2005). SAD was used to describe community patterns (Preston 1962b, Whittaker 1965, Dornelas et al. 2006), and to infer processes underlying the structure of the communities (Chave 2004, Dornelas et al. 2011). Species abundance has been implicitly considered in metacommunity models (Leibold et al. 2004), and also used to address questions from a functional perspective (Mouchet et al. 2010). Although at the centre of community ecology for more than seven decades, SAD still raises interesting and unanswered questions (McGill et al. 2007, Yen et al. 2017).

Despite its importance, information about species abundances is fragmentary and oftentimes available only from grey literature, or even in unpublished datasets in collections and universities (Cardoso et al. 2011). This creates a knowledge gap about species abundances in time and space, known as the Prestonian shortfall (Hortal et al. 2015). Prestonian shortfall is characteristic of tropical rainforests, which are among the most diverse and structurally complex ecosystems in the world, but present the largest knowledge gaps (Pereira et al. 2012, Zuidema et al. 2013).

The Atlantic Forest of South America is more intensely studied when compared to other tropical forests, but it is also among the most degraded and fragmented biomes worldwide. It is currently reduced to *c*. 12% of its original distribution, and 80% of Atlantic Forest remnants are smaller than

50ha (Ribeiro et al. 2009). The Atlantic Forest encompasses all mesic forest formations east of the South American dry diagonal (Oliveira-Filho and Fontes 2000, Eisenlohr and Oliveira-Filho 2015), and is among the most diverse regions in the world, harboring about 1 to 8% of the world's species (Silva and Casteleti 2003). For these reasons the Atlantic Forest has received special attention from researchers, conservation agencies and organizations, with special issues dedicated to it in tropical ecology and conservation journals (Morellato and Haddad 2000, Metzger 2009, Eisenlohr et al. 2015).

Mammals are one of the most studied taxa in the world, and we have extensive databases regarding their life history, ecology, physiology, and geographical distributions (Jones et al. 2009, Astúa 2015, Wilson et al. 2016, Bovendorp et al. 2017), besides a recent phylogeny which comprehends all its extant species (Faurby and Svenning 2015). Non-flying small mammals, less than 2 kg, occupy various ecological niches and dominate the terrestrial mammalian fauna (Eisenberg 1981), accounting for more than 55% of its species (Wilson and Mittermeier 2009). In Neotropical region, mammals are represented mostly by species belonging to the Orders Didelphimorphia and Rodentia. Small mammals are particularly suited for testing community patterns due to their richness, higher net speciation rate, greater specialization owing to energetic and dietary constraints, and high turnover of species between habitats and across the landscape compared to large mammals (Brown and Nicoletto 1991, Lopez et al. 2016).

Small mammals play important ecological roles as seed and mycorrhizal fungi dispersers (Grelle and Garcia 1999, Mangan and Adler 1999, 2000, Colgan and Claridge 2002, Vieira et al. 2003, Pimentel and Tabarelli 2004), seed predators (Sánchez-Cordero and Martínez-Gallardo 1998, Vieira et al. 2003, Galetti et al. 2015), arthropod predators (Santori et al. 1997, Carvalho et al. 2005), and prey for larger vertebrates (Wright et al. 1994, Terborgh et al. 2001). They have epidemiological importance, since many species can act as reservoirs for zoonotic diseases (D'Andrea et al. 2002, Oliveira et al. 2004, Teixeira et al. 2014). Small mammal communities have also been used as indicators of habitat quality, as the species respond differently to habitat fragmentation and degradation (Vieira et al. 2009, Caudill et al. 2015, Delciellos et al. 2016).

Many small mammal communities were sampled throughout the entire Atlantic Forest, but most of this information remains dispersed and not systematized. The dataset gathered here is a compilation of published scientific articles, book chapters, unpublished theses, dissertations, monographs, and original unpublished data on species abundance that covers the whole extension

of the Atlantic Forest, from northeastern Brazil to northern Argentina and eastern Paraguay. It represents one of the most comprehensive dataset for species abundance in a tropical rainforest. It includes 1,902 records of at least 111 species in 173 samples from 155 localities, totaling 42,617 individuals represented here. Furthermore, it includes additional information regarding the sampled localities, such as ecoregion, predominant vegetation type, and biogeographic subdivision.

METADATA

CLASS I. DATA SET DESCRIPTORS

A. Data set identity: Three files: Localities, Mammal communities and References

Title: Abundance of small mammals in the Atlantic Forest (ASMAF): a dataset for analyzing tropical community patterns

B. Data set and metadata identification codes:

Suggested Data Set Identity Codes: Localities.csv, Mammal_Communities.csv and References.csv

C. Data set description:

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Abstract: Local abundance results from the interaction between populational and environmental processes. The abundance of the species in a community is also one of the most basic descriptors of its structure. Despite its importance, information about species abundances is fragmentary, creating a knowledge gap about species abundances known as Prestonian Shortfall. Here we present a comprehensive dataset of small mammal abundance in the Atlantic Forest. Data were extracted from 114 published sources and from unpublished data collected by our research groups spanning from 1943 to 2017. The data set includes 1,902 records of at least 111 species in 155 localities, totaling 42,617 individuals represented. We selected studies that (i) were conducted in forested habitats of the Atlantic Forest, (ii) had a minimum sampling effort of at least 500 trap-nights, and (iii) contained species abundance data in detail. For each study, we recorded (i) latitude and longitude, (ii) name of the locality, (iii) employed sampling effort, (iv) type of traps used, (v) study year, (vi) country, and (vii) species name with (viii) its respective abundances. For every locality, we also obtained information regarding its (ix) ecoregion, (x) predominant vegetation type, and (xi) biogeographic subdivision. Whenever necessary, we also (xii) updated the species names as new species were described and some genera suffered taxonomic revision since the publication. The localities are spread across the Atlantic Forest and most of the small mammal species known for to occur in Atlantic Forest are present in the data set, making it representative of communities of the entire biome. This data set can be used to address various patterns in community ecology and geographical ecology, as the relation between local abundance and environmental suitability, hypothesis regarding local and regional factors on community structuring, species abundance distributions (SAD), and functional and phylogenetic mechanisms on community assembling.

D. *Key words*: abundance; Atlantic Forest; community structure; marsupials; rodents; small mammals; species composition.

E. Description: This data set includes 173 samples from 155 localities spread across the entire Atlantic Forest, from northeastern Brazil to northern Argentina and eastern Paraguay (Figure 1). From these samples, we obtained 1,902 records of at least 111 species, totaling 42,617 individuals. These 111 species included almost every species reported to occur in the Atlantic Forest (Paglia et al. 2012). Furthermore, in some of the studies the authors could not identify all species, presenting information only at the level of genus for some. Therefore, the number of species in this data set may be higher than the reported here. There are two regional sampling gaps: (i) a low number of samples on the Paranaense and Paulista plateaus, and (ii) an absence of samples in the north-eastern Minas Gerais e southern Bahia, along the Jequitinhonha river.

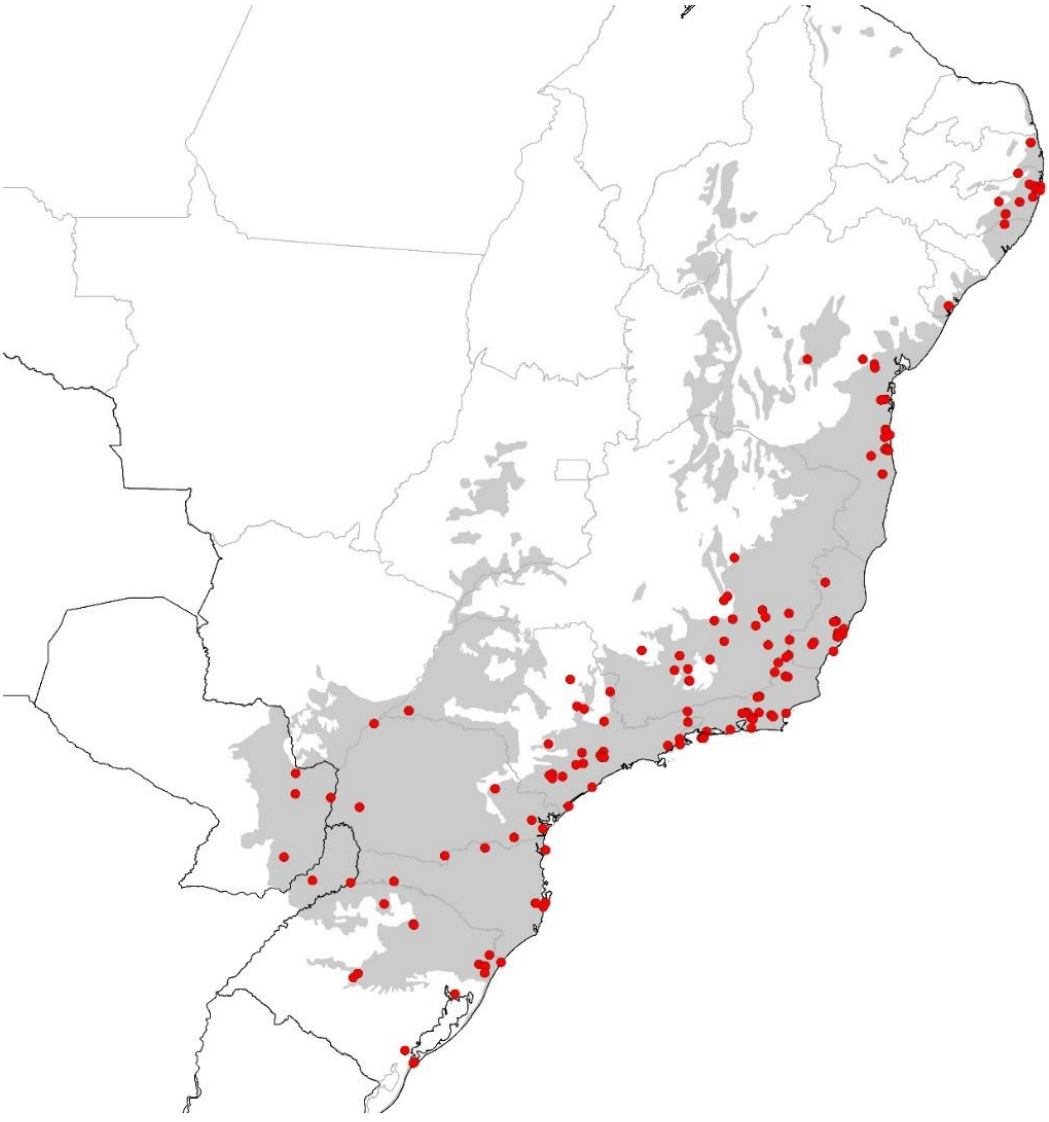

Figure 1. Distribution of the 155 localities (red dots) included in the data set of non-volant small mammal species abundance in the Atlantic Forest, South America. Each red dot can represent more than one sample as some localities were sampled more than once (total = 173 samples).

Considering the year when the data began to be collected in each sample, the oldest studies we found information are from 1943, but the bulk of the data set is formed by studies that started in the last years of the 1990 decade. The years of 2007 and 2008 had the highest number of small mammal communities sampled, and *c*. 65% of the samples of the last decade correspond to previously unpublished information or information available only in thesis, dissertations and monographs (Figure 2). Sampling effort of the studies ranged from 560 to almost 70,000 trap-nights. More than 75% of the studies had an effort of 10,000 trap-nights or less, but most of the studies (89.6%) employed an effort of more than 1,000 trap-nights (Figure 3).

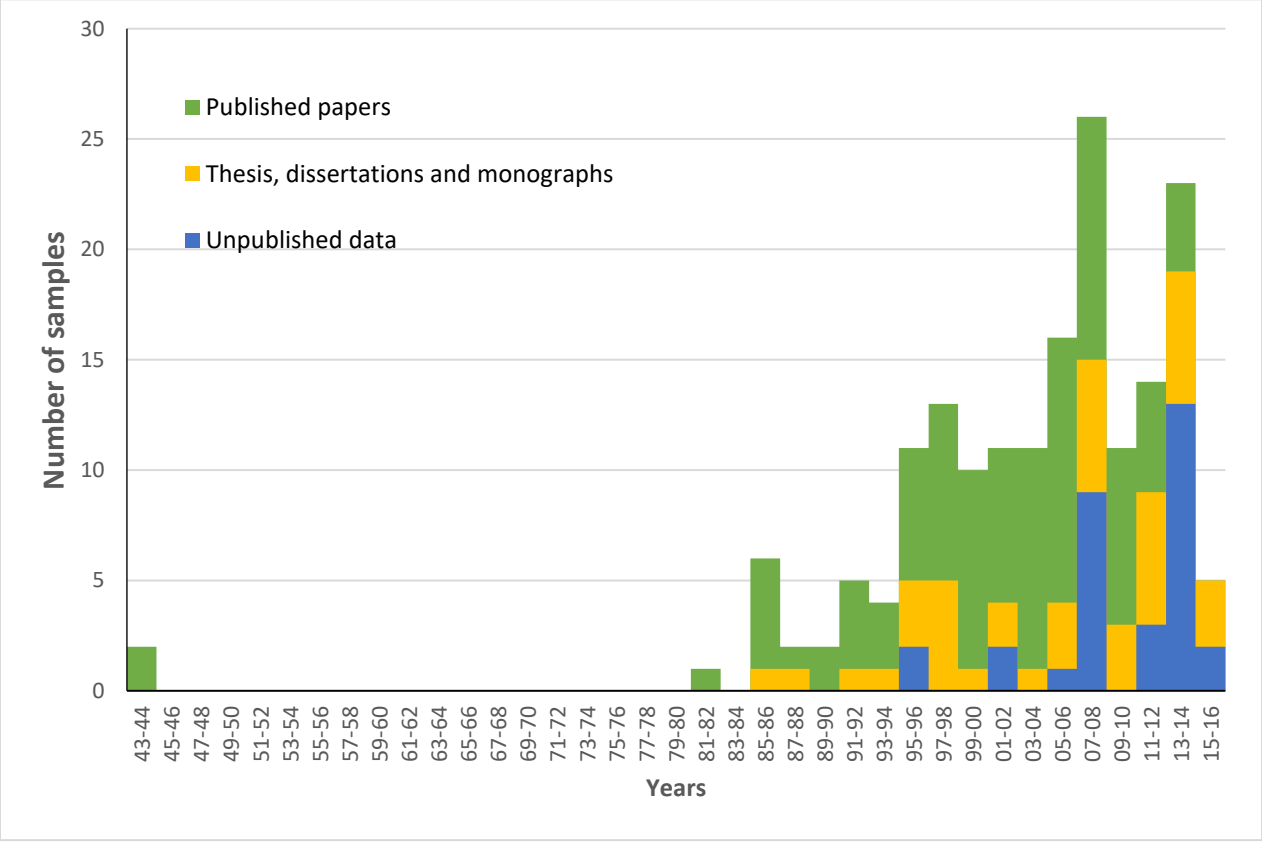

Figure 2. Number of samples of Atlantic Forest non-volant small mammal communities per year (n = 173), from 1943 to 2016, and source of data information included in the dataset (published

and unpublished data, thesis, dissertations, and monographs). The year is not the year of the source of the data, but the year data began to be collected in the locality in each sample.

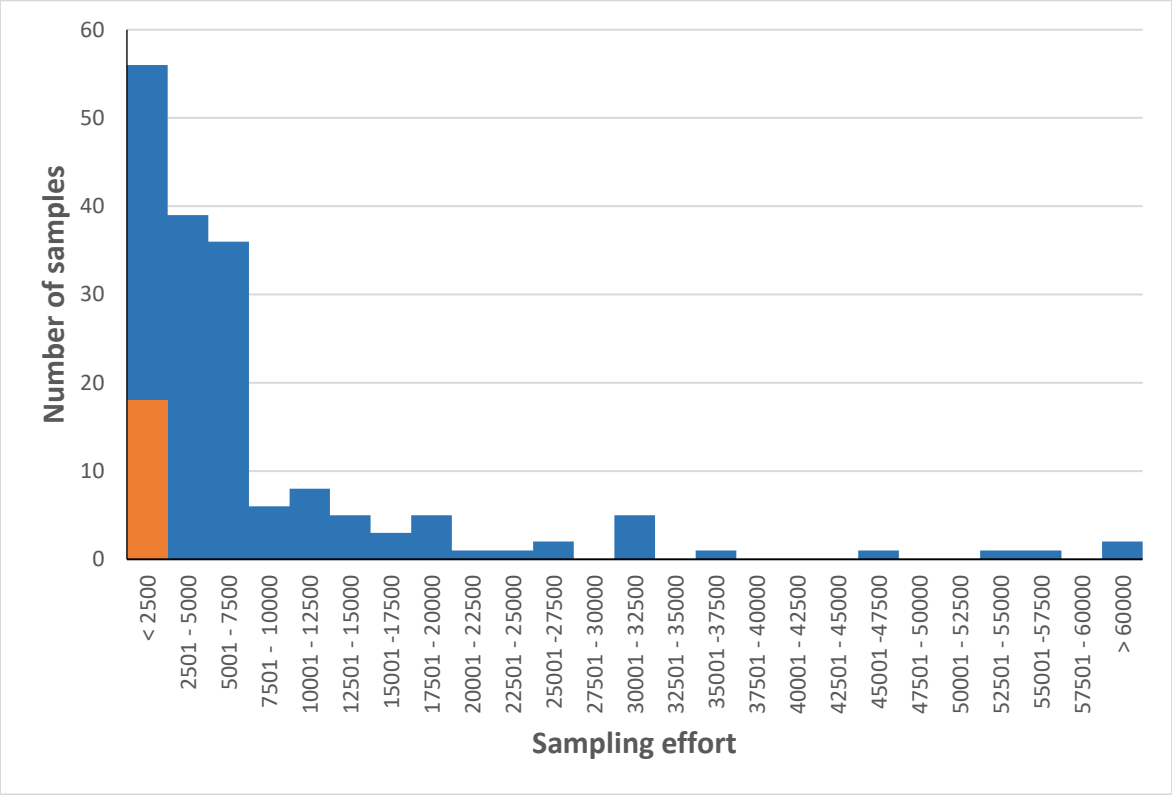

Figure 3. Number of samples of Atlantic Forest non-volant small mammals communities per sampling effort measured in trap-nights (n = 173). In orange are samples with a total sampling effort smaller than 1,000 trap-nights.

Our data set contains samples of 155 localities spread across the Atlantic forest, and captures the entire extension of this biome, as the samples are distributed throughout the ecoregions. Most of the localities (*c*. 87%) are in ecoregions where forest predominates, the other 13% are located in forest enclaves and non-forested ecoregions. Eleven of the 12 ecoregions, which form the core of the Atlantic Forest, are represented in this dataset, however, the ecoregions are not proportionally represented. Comparing the proportion of localities in each ecoregion to the relative area occupied by each ecoregion, and excluding the samples located outside of the core of the Atlantic Forest (*Cerrado*, *Caatinga* and Uruguayan savanna ecoregions), we could identify four ecoregions (Alto Parana Atlantic forests, Araucaria moist forests, Atlantic dry forests, and Bahia interior forests) as

underrepresented in this dataset, besides the moist forests of the Caatinga Enclave, which are not represented (Table 1).

Table 1. Proportion of localities (n=142) and area occupied by each of the 12 ecoregions that form the core of the Atlantic Forest biome. Localities outside the core of the Atlantic Forest (*Cerrado*, *Caatinga* and Uruguayan savanna ecoregions; n=13) were not considered.

Ecoregion	Area km²	% Area	# of localities	% of localities
Alto Paraná Atlantic forests	482851.5	36.03%	19	13.38%
Araucaria moist forests	215673.2	16.09%	14	9.86%
Atlantic Coast *restingas*	7556.7	0.56%	3	2.11%
Atlantic dry forests	114660.0	8.56%	1	0.70%
Bahia coastal forests	108802.1	8.12%	24	16.90%
Bahia interior forests	229157.1	17.10%	19	13.38%
Caatinga Enclaves moist forests	4776.3	0.36%	0	0.00%
Campos rupestres montane savanna	26313.0	1.96%	4	2.82%
Pernambuco coastal forests	17439.9	1.30%	6	4.23%
Pernambuco interior forests	22214.1	1.66%	5	3.52%
Serra do Mar coastal forests	102218.9	7.63%	45	31.69%
Southern Atlantic mangroves	8404.8	0.63%	2	1.41%

The same pattern of variation in the distribution of samples was observed for the vegetation types (Figure 4), as in *c*. 87% of the localities the forests are the predominant vegetation type, where 55% of the localities represent ombrophilous forests and 32% represent seasonal vegetation types. In 8% of the localities there was no predominant vegetation type, thus representing heterogeneous landscapes in which different vegetation types are in contact. All the major vegetation types present in the Atlantic Forest are represented in this data set.

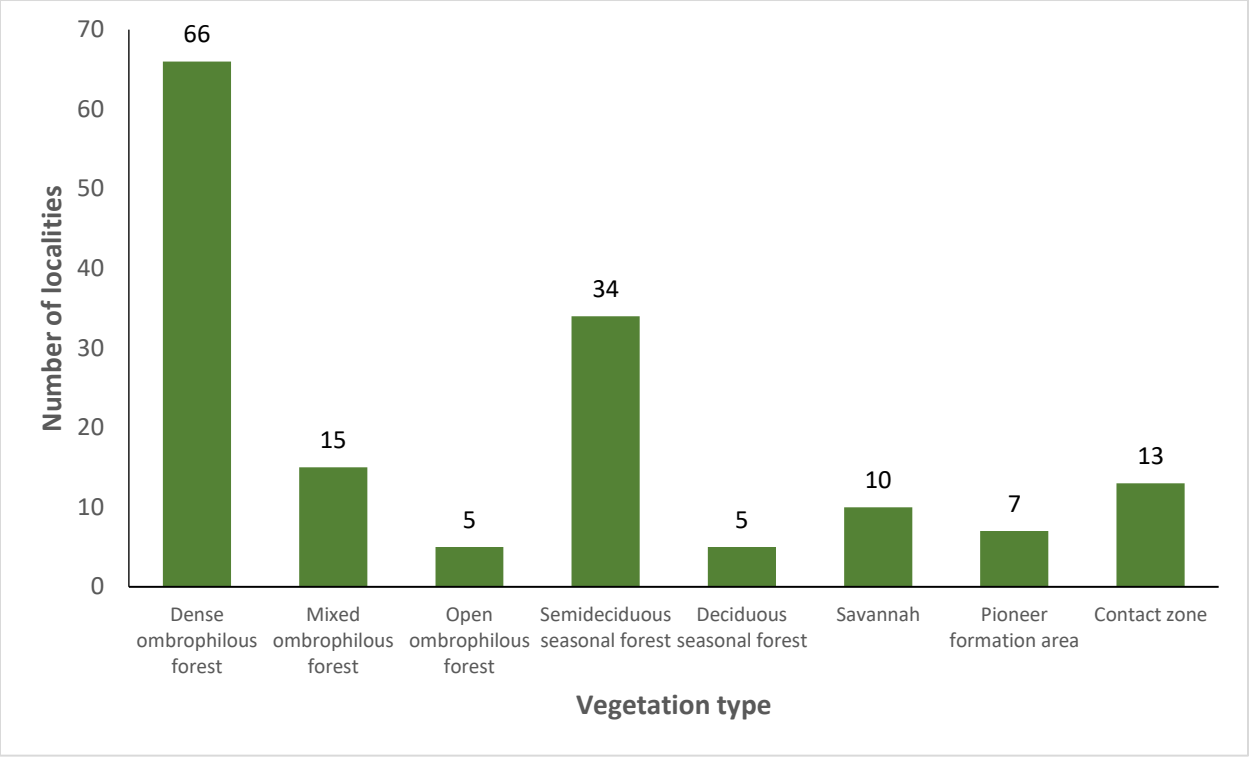

Figure 4. Number of localities (n=155) of each vegetation type where small mammal communities included in the dataset were sampled in the Atlantic Forest.

The 155 localities are also distributed among biogeographic subdivisions, but not every Atlantic Forest subdivision as defined by (Silva and Casteleti 2003), is represented in the samples. The Diamantina and Interior forests subdivisions are slightly underrepresented in this dataset, and we could not find any information regarding small mammal abundances for the São Francisco subdivision. The remaining subdivisions are well represented, regarding their relative areas (Table 2).

Table 2. Proportion of localities (n=155) and area occupied by each of the eight biogeographic subdivisions that form the Atlantic Forest biome.

Biogeographic subdivision	Area km²	% Area	# of localities	% of localities
Araucária forests	130349.2	9.73%	14	9.0%

Bahia	118507.0	8.84%	24	15.5%
Diamantina	51431.2	3.84%	4	2.6%
Interior forests	482257.1	35.99%	49	31.6%
Northeastern *brejos*	4776.3	0.36%	1	0.6%
Pernambuco	21544.4	1.61%	13	8.4%
São Francisco	232111.1	17.32%	0	0.0%
Serra do Mar	299091.3	22.32%	50	32.3%

The number of species in small mammal assemblages ranged from two to 29 species, but the majority of the studies (*c*. 61%) reported assemblages composed of five to 12 species (Figure 5). Few species in the data set are abundant and most of them are rare. The ten most abundant species on the data set accounts for 62.1% of all sampled individuals (Figure 6). Of these ten species, seven are rodents [*Akodon montensis* (n = 5299), *Oligoryzomys nigripes* (n = 4090), *Akodon cursor* (n = 2750), *Euryoryzomys russatus* (n = 2134), *Nectomys squamipes* (n = 1883), *Hylaeamys seuanezi* (n = 1617), and *Thaptomys nigrita* (n = 1406)], and three are marsupials [*Didelphis aurita* (n = 2779), *Marmosops incanus* (n = 2620), and *Metachirus nudicaudatus* (n = 1170)]. A similar pattern was observed regarding species occurrences in the samples, as the ten most frequent species in the data set account for 42.2% of all registered species, and 35 species are present in three samples or less (Figure 7). Seven of the most frequent species are also among the most abundant in the data set [*D. aurita* (n = 114), *O. nigripes* (n = 112), *N. squamipes* (n = 86), *M. incanus* (n = 80), *E. russatus* (n = 69), *A. cursor* (n = 68), and *A. montensis* (n = 57)], and the other three species are marsupials *Philander frenatus* (n = 65), *Gracilinanus microtarsus* (n = 57) and *Marmosa paraguayana* (n = 56).

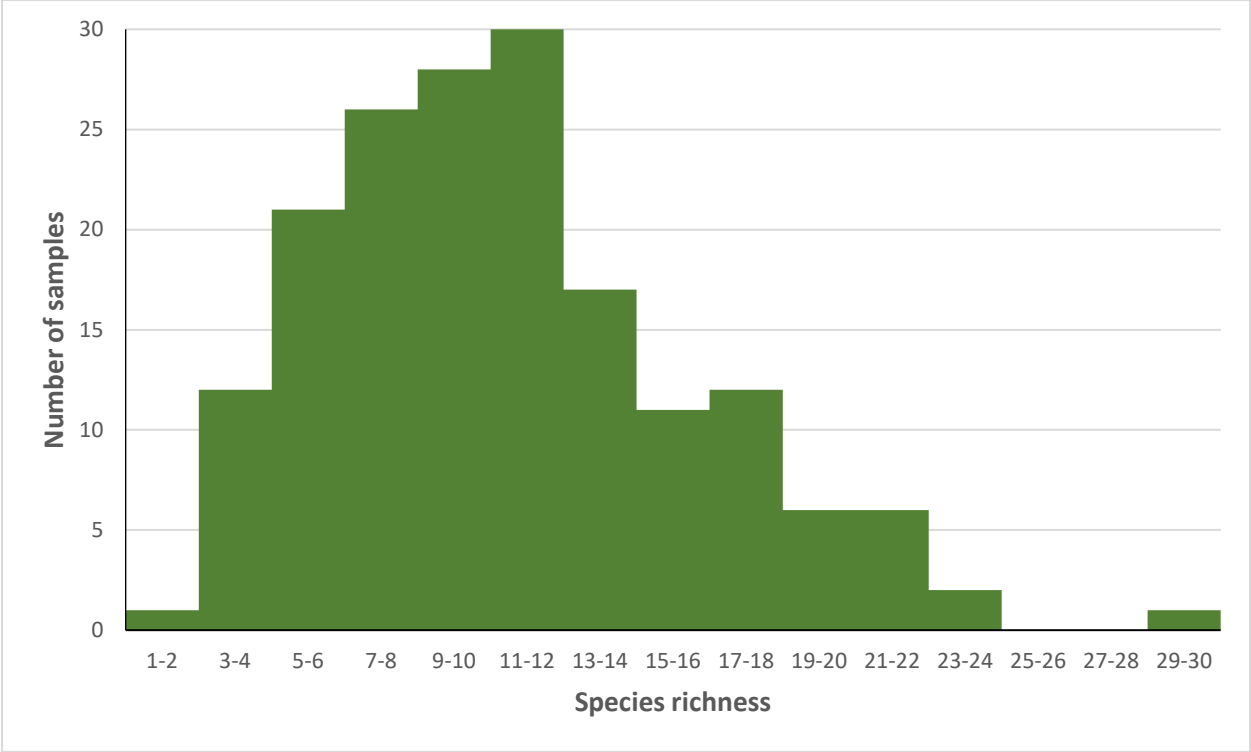

Figure 5. Number of samples (n=173) per species richness class for Atlantic Forest non-volant small mammal communities included in the dataset.

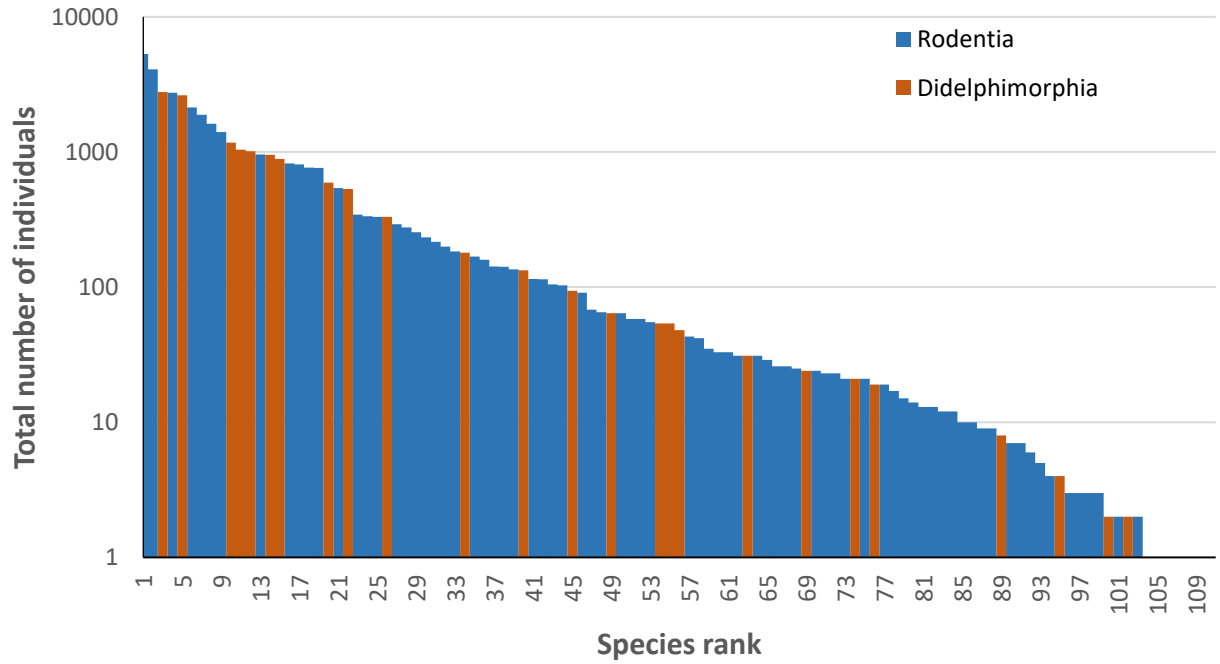

Figure 6. Species abundance distribution (on logarithmic scale) for the entire dataset (n = 173) of Atlantic Forest non-volant small mammal communities. Species are ranked based on their abundance in the dataset.

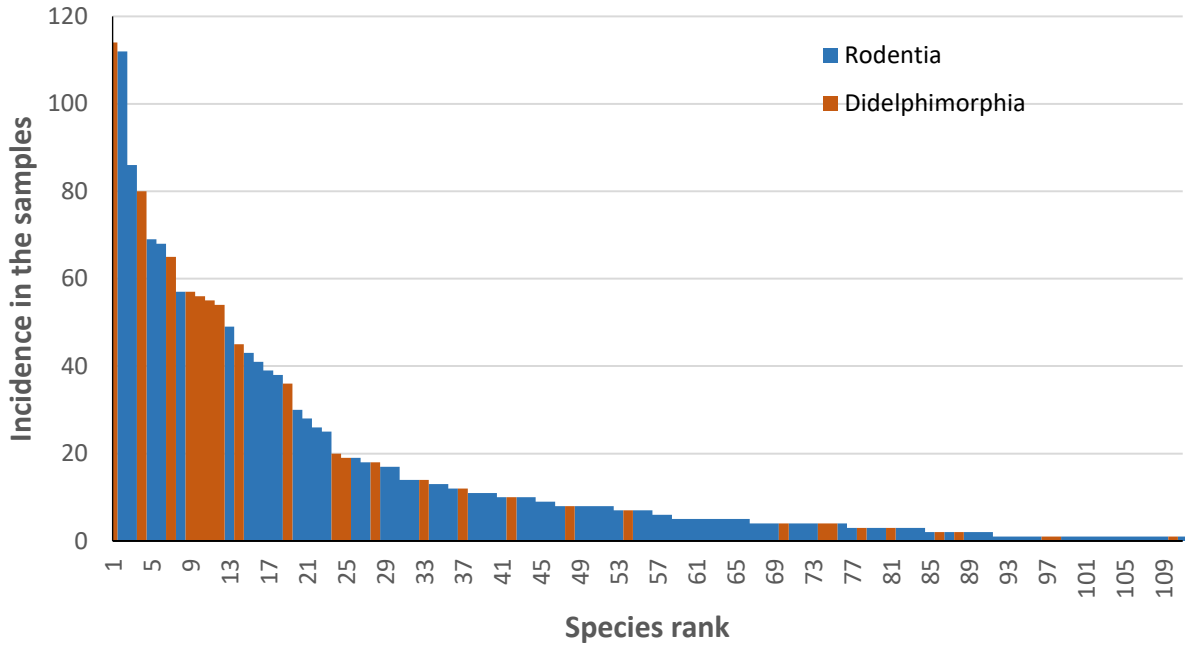

Figure 7. Number of species occurrences in the samples (n = 173). Species are ranked based on their incidence on the dataset of Atlantic Forest non-volant small mammal communities.

CLASS II. RESEARCH ORIGIN DESCRIPTORS

A. Overall project description

Identity: The structure of mammal communities in the Atlantic Forest

Originators: The project was coordinated by Marcus V. Vieira at the Universidade Federal do Rio de Janeiro, and the database was assembled by Marcos Figueiredo, with help from all the other authors.

Period of Study: The period of study in the selected studies range from 1943 to 2017.

Objectives: To present a comprehensive database regarding species abundance of small mammals from the entire Atlantic Forest. This data set can be used to address various patterns in community and geographical ecology, such as the relation between local abundance and environmental suitability, hypothesis regarding local and regional factors on community structuring, species abundance distributions (SAD), and functional and phylogenetic mechanisms on community assembling.

Abstract: Same as above.

Source(s) of funding: During the compilation of this dataset MSLF was supported by a post-doctoral grant from CNPq (150734/2015-8). CSB was supported by a post-doctoral grant from CAPES/FAPERJ (E-26/202.174/2015). ACD was supported by post-doctoral grants from CAPES/FAPERJ (E-26/202.144/2015) and CNPq-PPBio (383546/2014-1). EBG was supported by a graduate grate from CNPq (132758/2016-4). MK received grants from FAPERJ (E-26/110.844/2013, E-26/010.002038/2015) and Prociência/UERJ. MRA received grants from UESC (PROPP 00220.1100.1264 and 00220.1100.1645). PHA and DA received grants from CNPq and FACEPE. RC, LG, CEVG, and MVV received grants from CNPq and FAPERJ. HGB received grants from CNPq (307781/2014-3), FAPERJ and Prociência/UERJ. MW received grants from CNPq (440663/2015-6) and FAPERJ (E-26/110.505/2012). This project is a contribution of Rede de Biodiversidade FAPERJ (E-26/171.595/2004), Projeto Biodiversidade do Bioma Mata Atlântica (MCTI/JBRJ/UFRJ/MMA/PROBIO II), and Rede BioMA (PPBIO Mata Atlântica/MCTIC/CNPq procs: 457524/2012-0, and 457458/2012-7). IOC/Fiocruz provided additional funding for some of the samplings.

B. Specific subproject description

Site description: This data set is composed of communities sampled in forested environments of the Atlantic Forest biome, from northeastern Brazil to the north of Argentina and eastern Paraguay. The Atlantic Forest encompasses all forest formations east of the South American dry corridor, including semi-deciduous forests, subtropical *Araucaria* forests and northeastern *brejos de altitude* (Oliveira-Filho and Fontes 2000, Eisenlohr and Oliveira-Filho 2015). It is among the most diverse

regions in the world, harboring about 1 to 8% of the world's species (Silva and Casteleti 2003), including more than 300 species of mammals, of which about 90 are endemic to the biome (Paglia et al. 2012). Over 110 species of small mammals were registered for the Atlantic Forest (Paglia et al. 2012), and new species are still being described *(e.g.* Gonçalves and Oliveira 2014, Quintela et al. 2014, Pavan 2015).

Due to its geographic location that extends along Brazilian Atlantic coast, the Atlantic Forest was one of the first regions to be explored during Portuguese and Dutch colonization of Brazil (Marcgrave and Piso 1648). The economic cycles of timber logging, sugarcane, coffee plantations, cattle ranching, and later the industrialization and urban occupation, are mostly responsible for the ecosystem degradation (Dean 1995). Currently the natural remnants account for *c.* 12% of the Atlantic Forest original cover, and over 80% of these remnants are smaller than 50ha (Ribeiro et al. 2009). This situation, combined with its high biodiversity, places it on the top of conservation priorities among world ecosystems (Myers et al. 2000). Due to its importance, the Atlantic Forest has been a well-studied biome, and in the last two decades three important ecology and conservation journals dedicated special issues to it: Biotropica (Morellato and Haddad 2000), Biological Conservation (Metzger 2009), and Biodiversity and Conservation (Eisenlohr et al. 2015).

Research Methods: We assembled a database by consulting multiple sources of information: (i) 76 published scientific articles or book chapters, (ii) 37 unpublished theses, dissertations, and monographs, (iii) one technical report, and (iv) unpublished data collected by our research groups. We used online academic databases (Google Scholar, Scielo, Scopus) to search for articles and theses by using the keywords "small mammals", "rodents", "marsupials", "community", "composition", "assemblage", and "Atlantic Forest" combined in different ways. Searches were conducted in English and Portuguese. Eventually, an article found among the references of another publication, but not returned by the searches on the online databases, could also be included in our database. For inclusion in the database a study had to attend three criteria: (i) be conducted in forested habitats of the Atlantic Forest, thus excluding studies in open habitats as pastures, crops, scrub *restingas* (but included the *matas de restinga* formations), and *campos de altitude*, (ii) had a minimum sampling effort of at least 500 trap-nights, and (iii) contained species abundance data in details. If the study sampled both forested and open habitats and provided this information

separately, we opted to include only the individuals captured in forested habitats, as this is the main focus of the dataset.

Some publications sampled multiple areas in the same region, hence some publications could contain information on more than one locality. To consider a locality as independent, a publication had to present two basic information in a discrete way: (i) coordinates, and (ii) species abundance for each locality. Some localities were sampled by different people on different dates, thus providing independent samples from the same localities. The dataset totals 173 samples from 155 localities spread across the entire Atlantic Forest, from northeastern Brazil to northern Argentina and eastern Paraguay (Figure 1).

Experimental/Sampling design: For each locality, we recorded the following information: (i) latitude and longitude, (ii) name of the locality, (iii) employed sampling effort, (iv) type of traps used, (v) study year, (vi) country, and (vii) species name with (viii) its respective abundances. For every locality we also obtained information regarding its (ix) ecoregion (Olson et al. 2001), (x) predominant vegetation type (IBGE 2004), and (xi) biogeographic subdivision (Silva and Casteleti 2003). Whenever necessary, we also (xii) updated the species names following (Astúa 2015) for marsupials, and Patton et al. (2015) for rodents, as new species were described (Costa et al. 2011, Gonçalves and Oliveira 2014, Quintela et al. 2014, Pavan 2015), and some genera suffered taxonomic revision (Weksler et al. 2006, 2017, Voss and Jansa 2009, Asfora et al. 2011, Loss and Leite 2011, Percequillo et al. 2011, Brennand et al. 2013, Pardiñas et al. 2016) since the articles were published. However, some specimens were identified only at genus level on the source of information, and as the genus was revised and divided in several new genera potentially occurring in the same geographic region (*e.g.*, *Oryzomys*; Weksler et al. 2006), it was not possible to update the species name. In these cases, the name presented in the original source was maintained. Also, two species are presented on the dataset as undescribed species (sp. nov.). The first is an echimyid rodent of the *Phyllomys* genus, originally presented by Vieira et al. (2009) as *Phyllomys* sp., and later identified as an undescribed species (*Phyllomys* sp. 3) by Loss and Leite (2011). The other is a cricetid rodent presented by Pedó et al. (2010) as a *Akodon* sp. 2, but later identified as an undescribed form of *Deltamys* by Quintela et al. (2014).

CLASS III. DATA SET STATUS AND ACCESSIBILITY

A. Status:

Latest update: 04 August 2017

Latest Archive date: 04 August 2017

Metadata status: 04 August 2017, version submitted

Data verification: Marcos Figueiredo, Camila Barros, Ana Delciellos, and Edú Guerra read through the title and abstract of all studies, searching for potential candidates for inclusion on this dataset. Those articles which fulfilled the criteria for inclusion were assessed in detail by either Marcos Figueiredo, Camila Barros, Ana Delciellos, or Edú Guerra. The other authors compiled unpublished data collected by their research groups and passed it to Marcos Figueiredo and Pedro Cordeiro-Estrela for inclusion on the dataset. Marcos Figueiredo, Ana Delciellos, Pedro Cordeiro-Estrela, Lena Geise, and Marcelo Weksler then updated the species names.

B. Accessibility

Storage location and medium: Original data file is available as part of this data paper published in Ecology, and can also be found on GitHub Inc. in .csv format.

Download link: https://github.com/marcosfig/ASMAF

Contact person:

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Proprietary restrictions: Please cite this data paper when the data are used in publications.

Costs: None.

CLASS IV. DATA STRUCTURAL DESCRIPTORS

For simplicity reasons, we opted to divide the dataset into three complementary files. The first (Localities.csv) describes the characteristics of the sampled localities. The second

(Mammal_Communities.csv) contains information regarding species composition at each locality. The third (References.csv) contains the references cited on the database assembling.

A. Data Set Files

Identity: `Localities.csv`

Size: 12 columns and 174 rows records, including header row.

Format and storage mode: Text file, semi-colon delimited, no compression.

Header information: Header names.

Alphanumeric attributes: Mixed.

Special characters/fields: None.

Identity: `Mammal_Communities.csv`

Size: 4 columns and 1,903 rows records, including header row.

Format and storage mode: Text file, semi-colon delimited, no compression.

Header information: Header names.

Alphanumeric attributes: Mixed.

Special characters/fields: None.

Identity: `References.csv`

Size: 2 columns and 115 rows records, including header row.

Format and storage mode: Text file, semi-colon delimited, no compression.

Header information: Header names.

Alphanumeric attributes: Mixed.

Special characters/fields: None.

B. Variable definitions: An ID number was assigned to each locality. For every locality, we recorded the following information: (i) latitude and longitude, (ii) name of the locality, (iii) employed sampling effort, (iv) type of traps used, (v) study year, (vi) country, (vii) ecoregion, (viii) vegetation type, (ix) species name as provided in the original source, (x) updated species

438 name, for species where taxonomic modifications were made, (xi) its abundance, (xii) the
439 reference from where the data was obtained, and the (xiii) complete citation of the reference.
440

Variable name	Variable definition	Units	Storage type
SampleID	Individual identification number for each sample with abundance information. The same ID number is used on Localities.csv, Mammal_Comunities.csv, and References.csv files.	N/A	Numeric
Latitude	Geographic coordinates (latitude) for each study. When multiple geographic coordinates were provided, we used the mean value to represent the study location. Thus, geographic coordinates for each study were located in the center of the cluster of sampling sites.	Decimal degree	Numeric
Longitude	Geographic coordinates (longitude) for each study. When multiple geographic coordinates were provided, we used the mean value to represent the study location. Thus, geographic coordinates for each study were located in the center of the cluster of sampling sites.	Decimal degree	Numeric
Locality	Name of sampled locality as described in the study.	N/A	Character

Reference	Citation of the study. When this information came from unpublished source collected by our research groups, we cited it as [name of leading researcher] unpublished data.	N/A	Character
Sampling_effort	Total number of traps used to sample the locality, as provided by the authors. When this information was not readily available, we estimated the effort based on the sampling protocol described by the authors, or we contacted the authors to obtain it.	Trap-nights	Numeric
Traps	Type of traps used to sample the communities of small mammals at each locality. If more than one size was used for a given trap type, this information was also highlighted in this field.	N/A	Character
Study_year	The duration of study in years. When this information was not available, we contacted the authors to obtain it.	Year	Character
Country	Country in which the study was conducted.	N/A	Character
Ecoregion	Ecoregion in which the study was conducted (according to Olson et al. 2001).	N/A	Character

Vegetation_type	Predominant vegetation type in the region where the study was conducted [according to IBGE (2004)].	N/A	Character
Biogeographic subdivision	Atlantic Forest biogeographic subdivision where the study was conducted [according to Silva and Casteleti (2005)]	N/A	Character
Original_Species	Species name as provided by the original source.	N/A	Character
Valid_Species	Valid species name for those species for species where taxonomic modifications were made.	N/A	Character
Abundance	Number of captured individuals during the study.	# of individuals	Numeric
Citation	The complete citation from the reference where the data was obtained	N/A	Character

C. Data limitations. Our dataset has three main limitations: (i) we selected studies carried out in forest ecosystems only, (ii) the coarse spatial resolution of the vegetation type data, and (iii) the assumption that species identification in the original source was correct.

CLASS V. SUPPLEMENTAL DESCRIPTORS

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