



# Mammal collections in Brazil: overview and database

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**Abstract:** Advances in our knowledge on the planet biodiversity have been largely dependent upon biological collections, and today they continue to be the cornerstone of several disciplines. Recently, the Brazilian Society of Mammalogists established the Mammal Collections Committee (CCM-SBMz) aiming to collect, organize and share information on the mammalian collections in Brazil, as well as support their management. As a first step, our goal here is to provide a diagnosis of mammal collections in Brazil, and the CCM-SBMz contacted 100 collections and successfully registered 71, distributed in all five Brazilian regions. These collections house ca. 372,200 specimens, with 60% of these concentrated in three institutions: MNRJ, MZUSP, and MPEG. The material more commonly deposited are voucher specimens. The database is completely digitized or in process of digitization in most collections, however, this information is not widely available online. The geographic coverage of the collections is mainly regional or national. In number of specimens, Rodentia is the most frequent order in the collections, followed by Carnivora. At the family level, Didelphidae, Cricetidae, and Felidae are the more frequent taxa. This study shows that Brazil houses an important volume of mammalian specimens. However, considering the country's continental size and high mammal diversity, these numbers are still far from a sufficient representation of the Brazilian mammalian diversity. The results summarize the first efforts of the CCM-SBMz and the committee will continue monitoring the mammal collections in Brazil, as well as working to help the management and growth of collections.

**Keywords:** Conservation; Database; Genetic heritage; Natural History.

**Resumo: Coleções de mamíferos no Brasil: visão geral e banco de dados.** Avanços no conhecimento científico sobre biodiversidade têm sido, há séculos, grandemente dependentes de coleções biológicas, e atualmente estas oferecem suporte fundamental para diversas disciplinas. Neste sentido, a Sociedade Brasileira de Mastozoologia concebeu o Comitê de Coleções Mastozoológicas (CCM-SBMz) com o objetivo de coletar, organizar e compartilhar informações sobre as coleções de mamíferos brasileiras, assim como apoiar o gerenciamento dessas coleções. Como primeiro passo, nosso objetivo foi fornecer um diagnóstico das coleções de mamíferos no Brasil. O CMM-SBMz contactou 100 coleções e registrou 71, distribuídas em todas as cinco regiões brasileiras. Estas abrigam cerca de 372.200 espécimes, dos quais 60% estão depositados em apenas três coleções: MNRJ, MZUSP e MPEG. O material mais frequente nas coleções são espécimes testemunho. O banco de dados está completamente digitalizado ou em processo de digitalização na maior parte das coleções, contudo, estas informações são compartilhadas na web por poucas coleções. A cobertura geográfica das coleções é principalmente regional ou nacional. Taxonomicamente, o grupo mais comum nas coleções é a ordem Rodentia, seguida por Carnivora. Considerando o nível de família, Didelphidae, Cricetidae e Felidae são as mais frequentes. Este estudo mostrou que o Brasil abriga um volume relevante de espécimes de mamíferos em suas coleções, mas estes números estão longe de representar suficientemente a diversidade de mamíferos no país. Estes resultados resumem o primeiro esforço do CCM-SBMz, e o comitê continuará monitorando as coleções de mamíferos no Brasil, assim como trabalhando para colaborar com o gerenciamento e crescimento destas coleções.

**Palavras-chave:** Banco de dados; Conservação; História Natural; Patrimônio genético.



## INTRODUCTION

Biological collections are libraries of biodiversity, being fundamental for scientific research and education. Advances in the scientific knowledge on biodiversity have been largely dependent upon biological collections for centuries, and today they offer crucial support to several disciplines, such as taxonomy, systematics, conservation, evolution, zoonoses, agricultural sciences, ecology, and education (Barquez *et al.*, 2021; Bezerra, 2012; Schmitt *et al.*, 2018; Suarez & Tsutsui, 2004).

Mammal collections in Brazil have been growing in number and geographic representation, and this growth is reflected in the increase of abstracts dealing with collections in the past meetings of the Brazilian Society of Mammalogists (see <https://www.sbmz.org/anais>). This growth has paralleled the increase in the number of researchers and the development of Brazilian Mammalogy in the past two decades. However, ‘where are these collections located?’, ‘how many specimens they harbor?’, ‘who are the people in charge of them?’, are some of the questions frequently asked among members of our community. Some excellent isolated efforts to survey and/or diagnose these collections have been conducted in the past (Bezerra, 2012; Dunnum *et al.*, 2018), but such endeavor should constitute a continuous program, fostering the emergence of new collections, monitoring the growth of those already established, and providing an updated perspective on the mammalian diversity vouchered at Brazilian institutions.

For this purpose, the *Sociedade Brasileira de Mastozoologia* (SBMZ, Brazilian Society of Mammalogists) established the *Comitê de Coleções Mastozoológicas* – CCM-SBMz (Mammal Collections Committee; see <https://www.sbmz.org/comite-colecoes-mastozoológicas>) in November 2020. The CCM-SBMz is formed by members of the current board of SBMZ directors, as well as two researchers from each of the five geographic regions of Brazil, *i.e.*, North, Northeast, Central-West, Southeast, and South. This committee aims to i) provide a diagnosis of mammal collections in Brazil; ii) provide, at the first moment, published literature with guidelines and information on curatorial procedures (available at <https://www.sbmz.org/comite-colecoes-mastozoológicas>); iii) facilitate communication among curators, and between them and the SBMZ. In the medium- and long-terms, we aim to iv) promote workshops and training on curatorial practices; v) offer training on database and specimen digitization; vi) stimulate curators to upload their collection databases in worldwide repositories, such as GBIF (Global Biodiversity Information Facility – <https://www.gbif.org>) and VertNet (<http://vertnet.org>).

The present contribution is the first step towards reaching objective “i): provide a diagnosis of mammal collections in Brazil”. Here, we report the results of an effort focused on identifying and locating mammal scientific collections in the Brazil, providing a qualitative and quantitative overview of these collections.

## MATERIAL AND METHODS

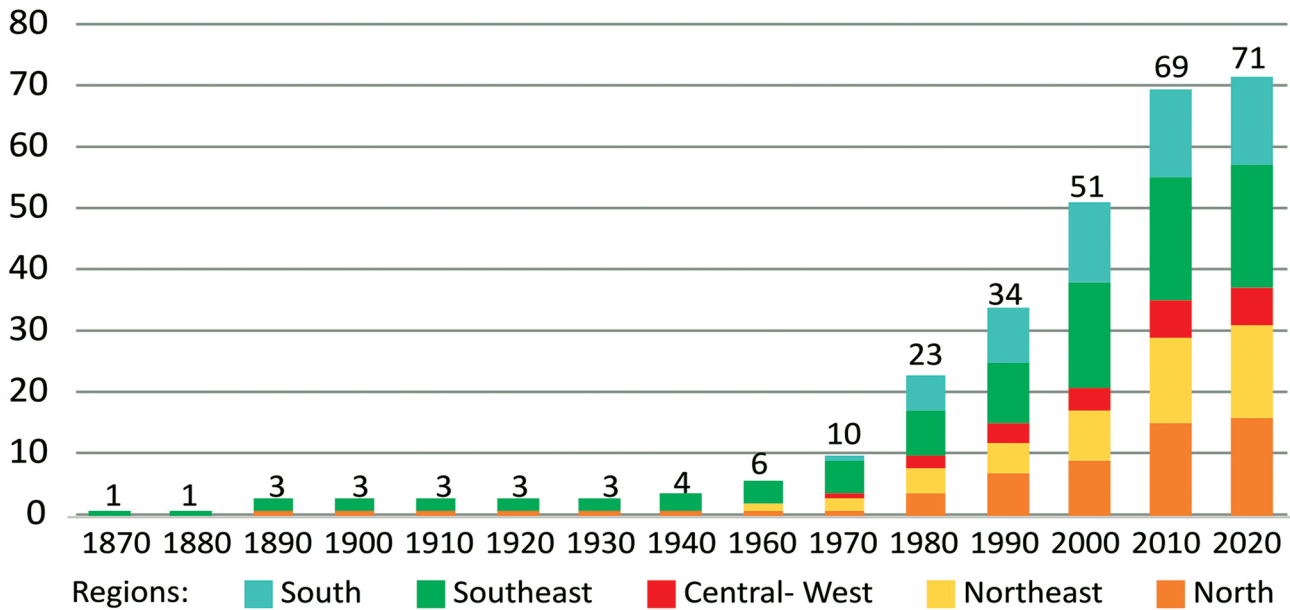
This diagnostic survey was implemented through a detailed questionnaire, via Google Forms (Google LLC®), made available for respondents from December 2020 to May 2021. The forms were sent to curators and/or collection managers in charge of collections, by the members of the committee representing the five Brazilian regions: North, Northeast, South, Southeast, and Central-West. The form (Appendix S1) was organized in two sections. The first one dedicated to general information about the collection, such as collection name, acronym, person in charge, contact (address, e-mail and phone number, when available), year of foundation, and institutionalization process, as well as collection information, such as type of material (*e.g.*, if it includes specimens, tissues), size, geographic range, taxonomic scope (at the order level), digitization, and dissemination process. The second part of the form focused on the taxonomic holdings of these collections, on the family level. The starting point of the survey was Bezerra (2012) and Dunnum *et al.* (2018) and a preliminary list of collections and curators compiled by members of the CCM-SBMz. The list was then further expanded following indication of additional collections by the curators contacted by the committee and by colleagues.

## RESULTS

Our survey revealed the existence of 100 mammal collections in Brazil. The form was sent to all curators or staff in charge of these collections, but only 71 answered the form. Therefore, our diagnostics is based on information recovered from 71 collections in Brazil (full list available in Appendix S2) for most questions, and 61 collections for taxonomic coverage at family level (the second part of the form).

The 71 registered collections are distributed in all five Brazilian regions. The oldest mammalogy collection in Brazil is housed in the Museu Nacional/Universidade Federal do Rio de Janeiro (MNRJ) and was established in the mid 19<sup>th</sup> century, and in 1876 its collection was firstly published. During the 19<sup>th</sup> century and first decades of 20<sup>th</sup> the century, three institutions in Brazil held more representative collections of mammals: MNRJ, Museu de Zoologia da Universidade de São Paulo (MZUSP), and Museu Paraense Emílio Goeldi (MPEG) (Figure 1). From the second half of the 20<sup>th</sup> century on, scientific collections have been created over time and across the country (Figure 1), but at a very slow pace for most of the 20<sup>th</sup> century. From the 1960’s to the present there is a general trend of increasing the number of collections, with the most noticeable increment in the first decade of the 21<sup>st</sup> century (2000-2010), when 35 collections were established.

Only by the end of the 1970’s mammal collections were established in all Brazilian regions. Presently, most of these collections are based in the Southeast region, which houses 27% (n = 19) of all collections in the



**Figure 1:** Implementation of mammal collections in Brazil over time and by region. The bars represent the accumulated amount of collections, and the colors represent the Brazilian regions: light blue, South; green, Southeast; orange, North; yellow, Northeast; and red, Central-West.

country, followed by the North, South, Northeast, and Central-West regions, with 23% ( $n = 16$ ), 21% ( $n = 15$ ), 21% ( $n = 15$ ), and 8% ( $n = 6$ ), respectively (Figure 2). Although North, Northeast, Southeast, and South regions house a similar amount of mammal collections, *ca.* 60% of total specimens are deposited at Southeast institutions (Figure 2). Considering the federative units of Brazil (states and the Distrito Federal) (Figure 3), the Rio Grande do Sul state has highest number of collections ( $n = 12$ ), while in Roraima state no collection was recorded.

These Brazilian mammal collections together sum approximately 372,200 specimens, 60% them housed in only three institutions (Figure 4): Museu Nacional/Universidade Federal do Rio de Janeiro (MNRJ), the largest collection with approximately 100,000 specimens, Museu de Zoologia da Universidade de São Paulo (MZUSP), *ca.* 50,000 specimens, and Museu Paraense Emílio Goeldi (MPEG), *ca.* 45,677 specimens (the current estimated number at the MZUSP collection is 66,000 specimens, as this institution received the donation of 16,000 specimens of the bat collection of UNESP São José do Rio Preto, previously curated by the late Dr. Valdir Antonio Taddei). An expressive number of collections ( $n = 27$ ) has an intermediate number of records, ranging between 1,001 and 5,000 specimens (Figure 4). The collections are housed in institutions of different scopes, such as public and private universities, as well as research and educational institutes. However, 28% of these collections are not yet officially recognized by their housing institutions (Figure 5A).

Almost all collections ( $n = 69$ ) house specimens as skins, skulls, partial skeletons, and fluid preserved entire organisms and parts (Figure 6), and tissue samples are available in more than half of the collections ( $n = 35$ ). In addition, 41% of the collections contain some type material, *i.e.*, holotypes, syntypes, neotypes, lectotypes, and paratypes (Figure 5B). Only 35% of the collections have their catalogues completely digitized, while in 52%

them the digitization process is ongoing (Figure 5C). In this scenario, only 25% of the collections have catalogue data available online, such as websites of the collection/institution itself or repositories such as SpeciesLink or GBIF (Figure 5D). Even when considering general information about the collections, such as contact information, size and geographic coverage, only 38% of collections provide this information as available on the web (Figure 5E).

Among the surveyed Brazilian collections, 78% accept and receive specimens from environmental consulting projects; only 8% are not interested in obtain these specimens (Figure 5F).

Regarding the geographic range covered by Brazilian mammal collections, we divided the coverage in five categories: Global, South American, National, Regional, and State. As seen in Figure 7, 39% of these collections have regional coverage, followed by 31% with national coverage, 18% State, 9% South American, and 3% Global.

Regarding the representativeness of the Brazilian states in those collections and how many collections are present in each of those states, Pará is the most represented, with specimens/material distributed in 35 collections, 27 of them outside Pará state. At the other extreme, specimens from Distrito Federal are represented in only nine mammal collections, and this federative unity has only one collection, housed at the Universidade de Brasília (Figure 8). Another interesting result is associated to the Rio Grande do Sul state, which is represented in 27 collections, almost half of them on its territory.

Among the 71 Brazilian collections included in this survey, most of them house at least one specimen of the order Rodentia (84.5%; Figure 9), the most speciose mammalian order in Brazil (Abreu *et al.*, 2021). However, the second most frequent order in the collections is Carnivora (81.6%), the sixth most diverse order in Brazil. The following more frequent orders are Chiroptera (80.2%), Didelphimorphia (76%), and Primates (74.6%), which are



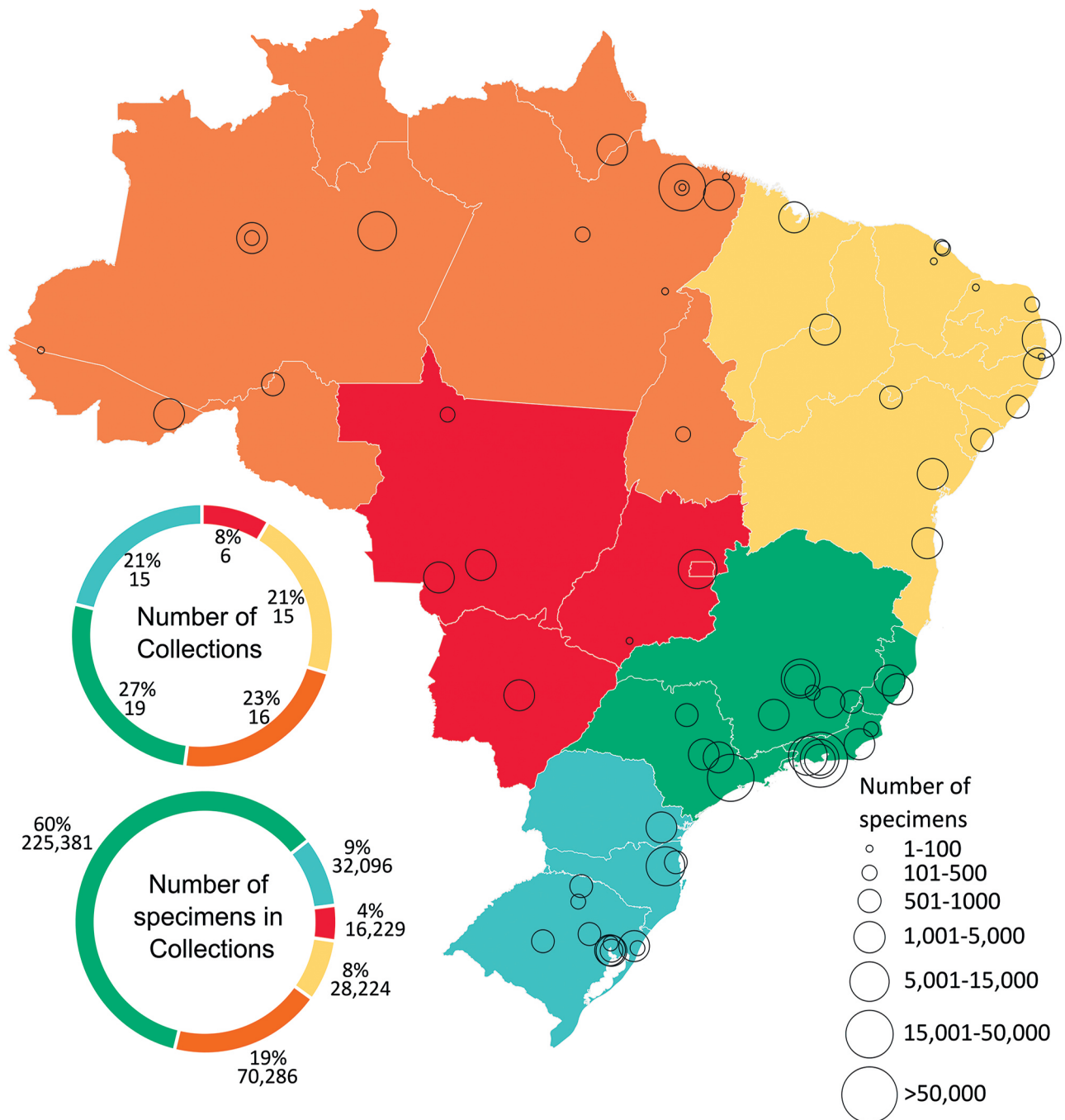
respectively the second, the fourth and the third places considering species diversity in Brazil (Abreu *et al.*, 2021).

Among the 10 families that are widely represented in Brazilian collections (Figure 10), six belong to orders of volant and non-volant small mammals (Rodentia, Didelphimorphia, and Chiroptera).

**DISCUSSION**

Our results have enriched the understanding about mammal collections in Brazil in different aspects, such

as quantity, their goals, taxonomic and geographic coverage. From start, the number of collections registered here goes well beyond those previously raised. Bezerra (2012) and Dunnum *et al.* (2018) listed 13 and 16 collections in Brazil, respectively. Their efforts were focused to provide a general panorama of mammal collections and a directory of all collections of the Western hemisphere. Although essential, these studies were not designed to evaluate the entirety of the Brazilian collections, the main objective of the present contribution. We were able to contact 100 collections and received valuable information from 71 of them, allowing us to provide a clear



**Figure 2:** Location and size of Brazilian mammal collections. The center of the circles indicates the exact location of a given collection and its diameter is proportional to the size of the collection. The colors of the map indicate the Brazilian regions: light blue, South; green, Southeast; orange, North; yellow, Northeast; and red, Central-West. The ring chart, on the upper left, represents the number of collections by region of Brazil, with the colors corresponding to the colors on the map (South, Southeast, North, Northeast and Central-West); the ring chart on the lower left side indicates the number of specimens deposited in each region of the country, in the same way the colors correspond to the regions indicated on the map.



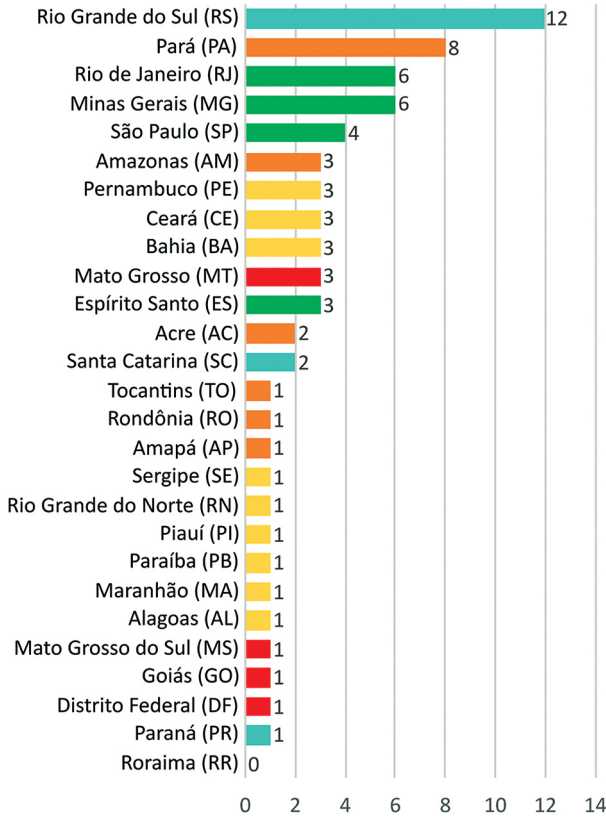


Figure 3: Number of mammal collections in Brazil, according to the federative units. The colors represent the regions, according to the map of Figure 2: light blue, South; green, Southeast; orange, North; yellow, Northeast; and red, Central-West.

and more detailed diagnosis of the status of these collections: where are they located, who are the people in charge, and where are the most representative taxa and their geographic coverage, among other relevant data.

We noted that although the number of collections is very similar among Brazilian regions (except for the Central-West region), the Southeast collections hold 60% of every catalogued specimen. This may be explained because this region houses two of the three largest (and oldest) collections in the country, and the Rio de Janeiro was the capital of Brazil from 1763 until 1960.

The Brazilian collections together house about 372,000 specimens, and the largest one, MNRJ with about 100,000 specimens, showed an exponential growth between the 1930's and 1950's. The key factor for this increase were cooperation agreements between this museum and public health agencies (with the involvement of João Moojen, then curator of MNRJ), mainly the National Plague Service ("Serviço Nacional de Peste", in original Portuguese language). The National Plague Service was established to monitor bubonic pest outbreaks in northeastern Brazil, which contributed with 55,291 specimens of small mammals, mostly rodents (Oliveira & Franco, 2005).

Considering the 372,200 specimens above mentioned and that our country is home to at least 770 species of mammals ([www.sbmz.org/mamiferos-do-brasil](http://www.sbmz.org/mamiferos-do-brasil); Abreu *et al.*, 2021), we could extrapolate a generalization that in our collections we would have *ca.* 489 specimens *per* species, a number one might consider not a very bad representation, if, and only if: i) this distribution of specimens *per* species was homogeneous taxonomically; ii) all specimens were evenly distributed across geography, age classes and sex, and iii) all specimens were well prepared, with tissue samples, karyotypes, precise collection localities and geographical coordinates. But these assumptions were not real, as our collections amass, for instance, hundreds of specimens of genus *Cerradomys* from Northeastern Brazil at MNRJ (Brandt & Pessoa, 1994; Caccavo & Oliveira, 2016; Percequillo *et al.*, 2008) but only one specimen of *Rhagomys longilingua* at the MZUSP collection, so far the only known specimen of this species in Brazil (Percequillo *et al.*, 2017). Truly, this number represent a small figure: it is still very far from a sufficient representation of the Brazilian mammalian diversity, which is one of the largest in the world (Brito *et al.*, 2009; Costa *et al.*, 2005). For instance, mammal collections in Mexico house 512,000 specimens, an amount 1.4 times larger than the sum of voucher specimens at Brazilian institutions, even though Mexico has a territory four times smaller than Brazil, and 30% less mammal species (Abreu *et al.*, 2021; Dunnum

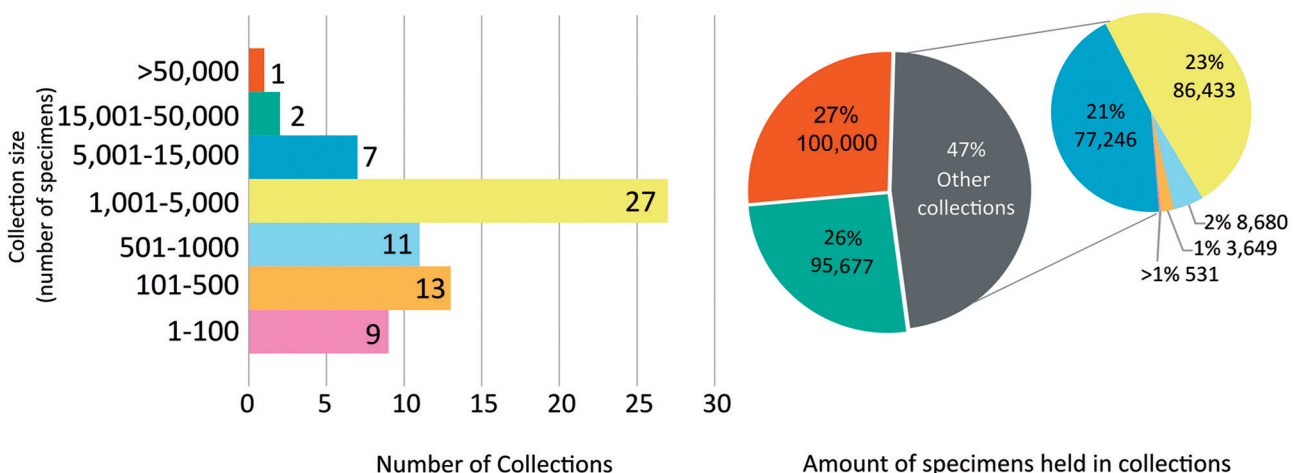
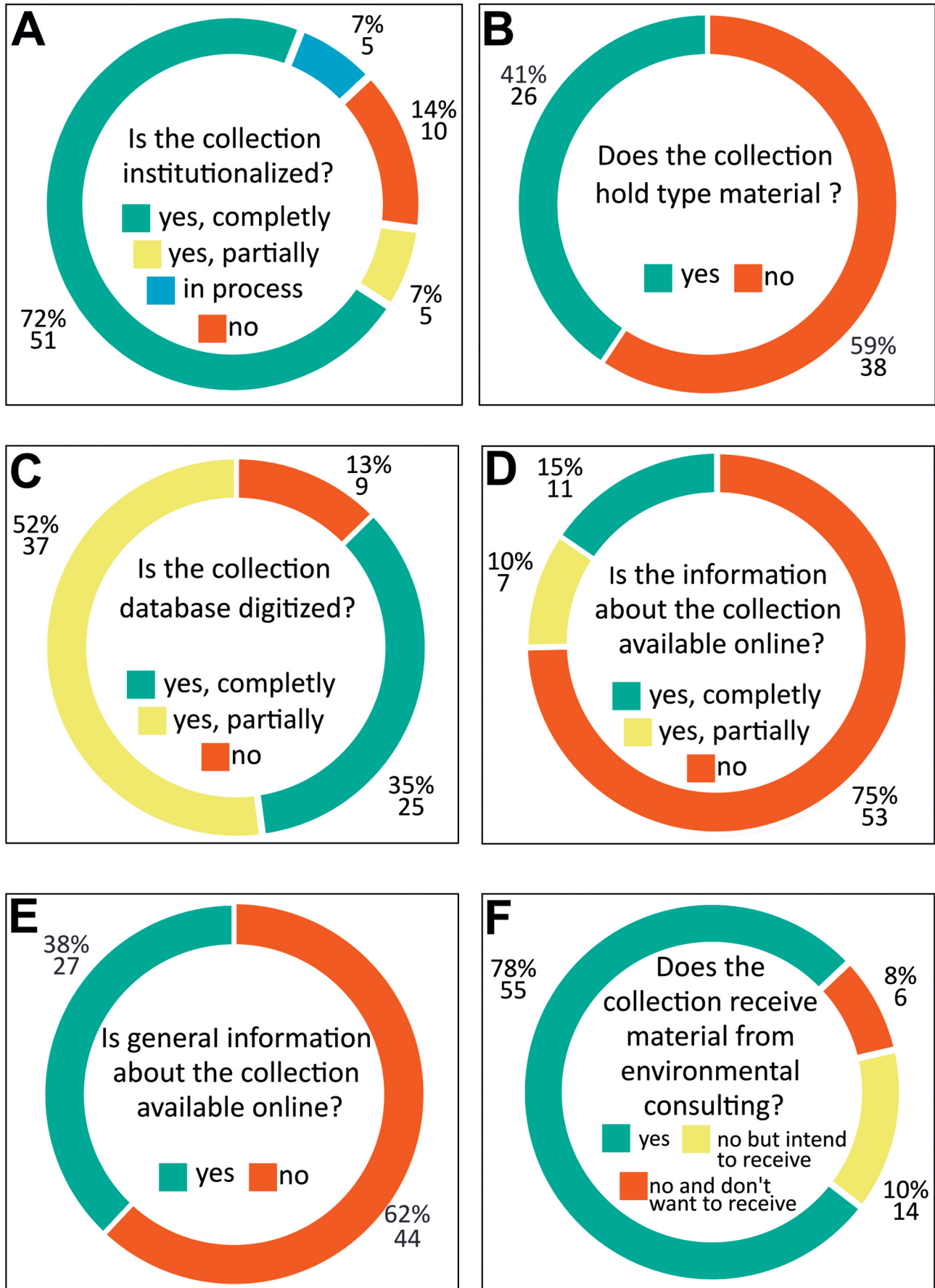
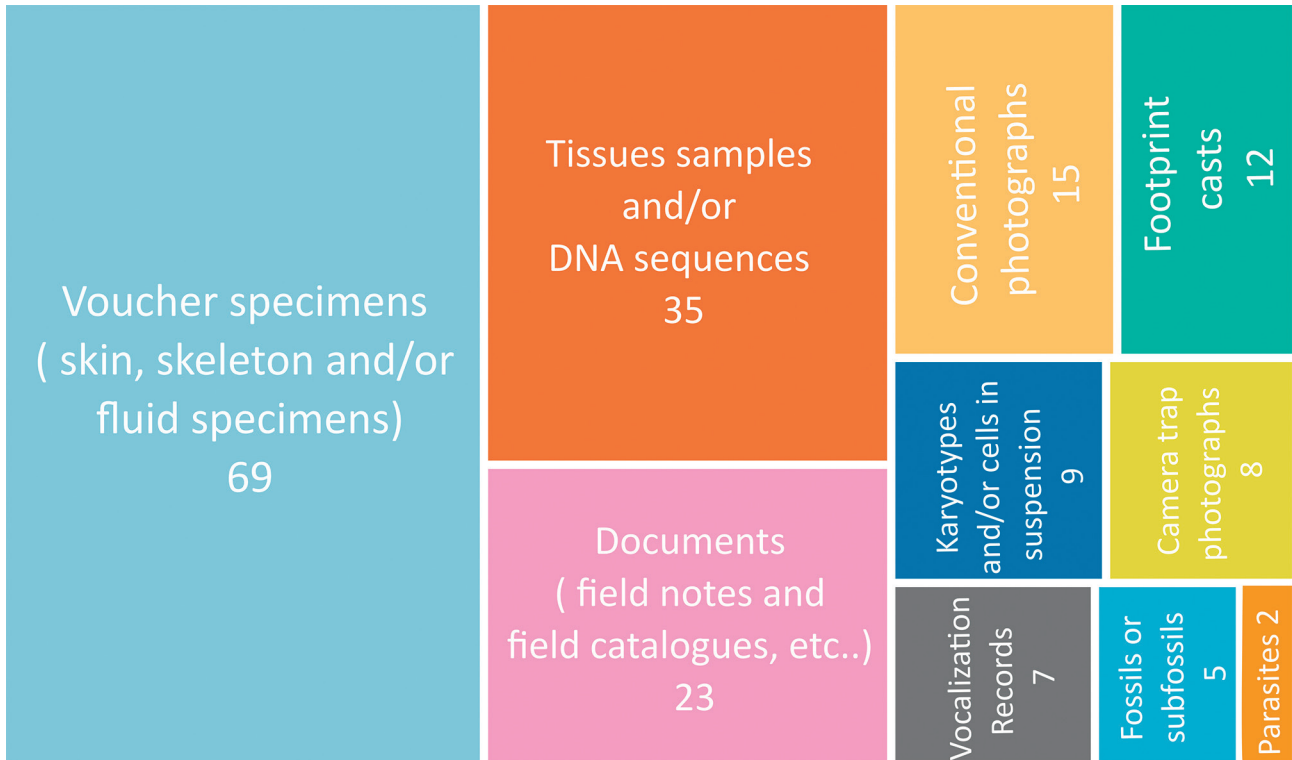


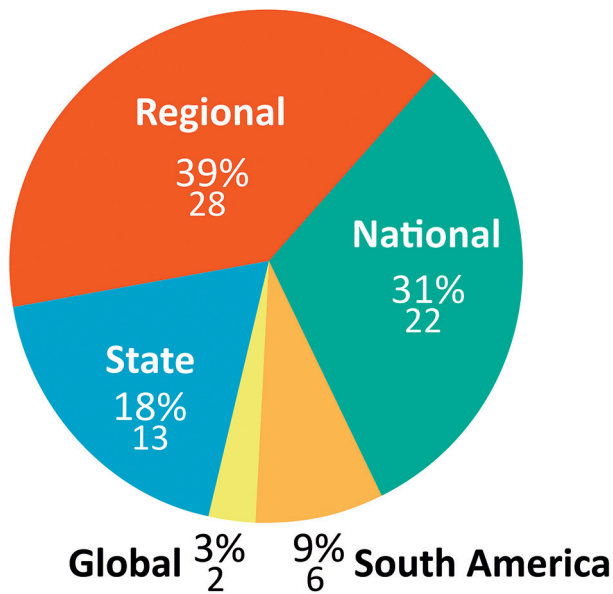
Figure 4: Classification of Brazilian mammal collections according to the size of the collection. Left: Number of collections in a given collection size class. Right: Pie chart showing what number of specimens are deposited in each holding size class. The color of the columns was kept in the slices, representing the collection size classes.



**Figure 5:** Charts resuming six surveyed subjects: A – Recognition of the situation of Brazilian mammals collections to institutions in which they are housed; B – Presence of type material in the Brazilian collections; C – Status of the process of digitizing the database of Brazilian mammal collections. D – Status of availability of the collection in an online database; E – Status of availability of information on specimens and/or general information on Brazilian collections of mammals on other websites; and F – Receptiveness of the collection to material from environmental consultancy. The numbers are the proportion, in percentage, and the absolute number.



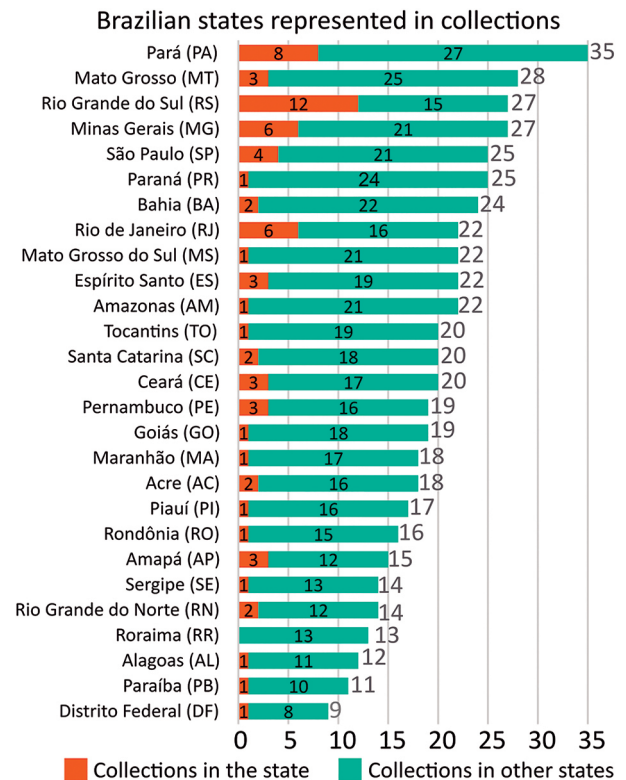
**Figure 6:** Treemap chart showing the categories of material housed in Brazilian mammal collections. The boxes are proportionally suited to the frequency of a certain category of material, and the numbers represent the amount of collections that house the material.



**Figure 7:** Representativeness of the collection on a geographic scale. The numbers are the proportion, in percentage, and the absolute number.

*et al.*, 2018; Ramirez-Pulido *et al.*, 2014). Therefore, efforts to increase the number and size of mammal collections in Brazil are pressing.

The data digitalization of permanent catalogues, in addition to being a backup of the information associated with the voucher specimens, provides space for the inclusion of associated data that would not be easily possible to register in the physical catalogue, and facilitates curating and managing collection data (ASM, 2004; Barquez *et al.*, 2021). This is also usually the first step in sharing information in online databases, such as the GBIF, which ends up increasing the visibility and accessibility of these



**Figure 8:** Brazilian states represented in mammal collections. In orange, the number of collections based in the state itself; in green, collections based in other states that have specimens from the state indicated on the y axis. The x axis is the number of collections.

collections (Nelson & Ellis, 2018). In fact, these demands are in consonance with the guidelines of the “Sistema de Informação sobre a Biodiversidade Brasileira (SIBBR)”. The SIBBR (<http://www.sibbr.gov.br>) aims to integrate in

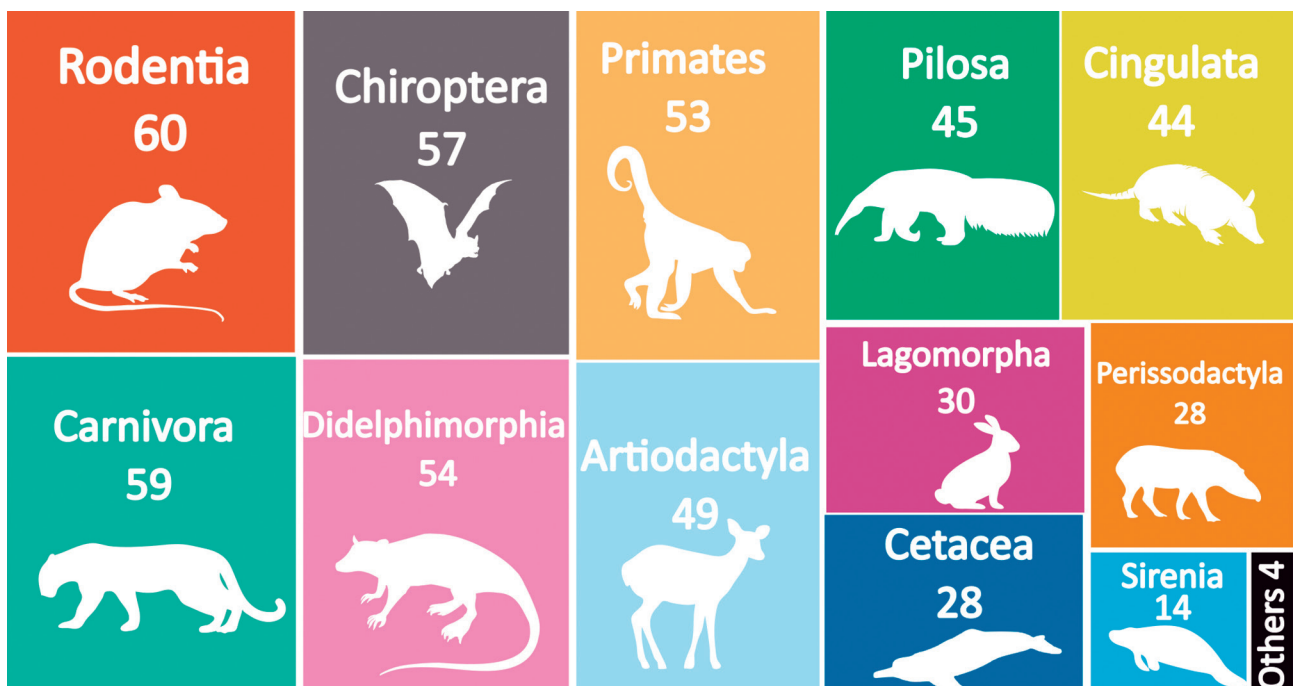


a dynamic way the records of the scientific collections and be a tool for conservation decisions, as well as help those surveying data for their research.

Eight percent of the Brazilian collections are not interested in receive specimens from consulting projects. Even small, this number is intriguing, since specimens are always important for a collection, but also raise a probable hypothesis for this rejection: the acceptance of these specimens could represent additional costs in time, human resources, and funds. In general, environmental consultancy companies do not contribute with curatorial material and other costs (*i.e.*, alcohol, vials for skulls, boxes and trays for specimens, taxidermists, among other needs), but it is also a fact that is not a usual practice of the collection staff to require for such material (A.R. Bezerra, personal observation). In other hand, it is known that most Brazilian collections are managed by professionals that accumulate several functions, including teaching, research and administrative activities, and are housed at institutions that generally do not allocate people and funds for curatorial procedures (Vivo *et al.*, 2014). However, material from environmental consulting can contribute to the growth of collections, providing important information on the distribution of species and specimens for future taxonomic revisions (Mendes *et al.*, 2020). In order to encourage a good preparation of the specimens, especially from environmental consultants, the CCM-SBMz intends to work on guidelines what can help both collections and collectors. Among environmental consulting projects, road ecology monitoring holds great promise to increase the size and taxonomic coverage of mammals in collections. Given the extent of the Brazilian paved road network and the annual estimate of mammal roadkills per kilometer (Abra *et al.*, 2021; Pinto *et al.*, 2020), tens of

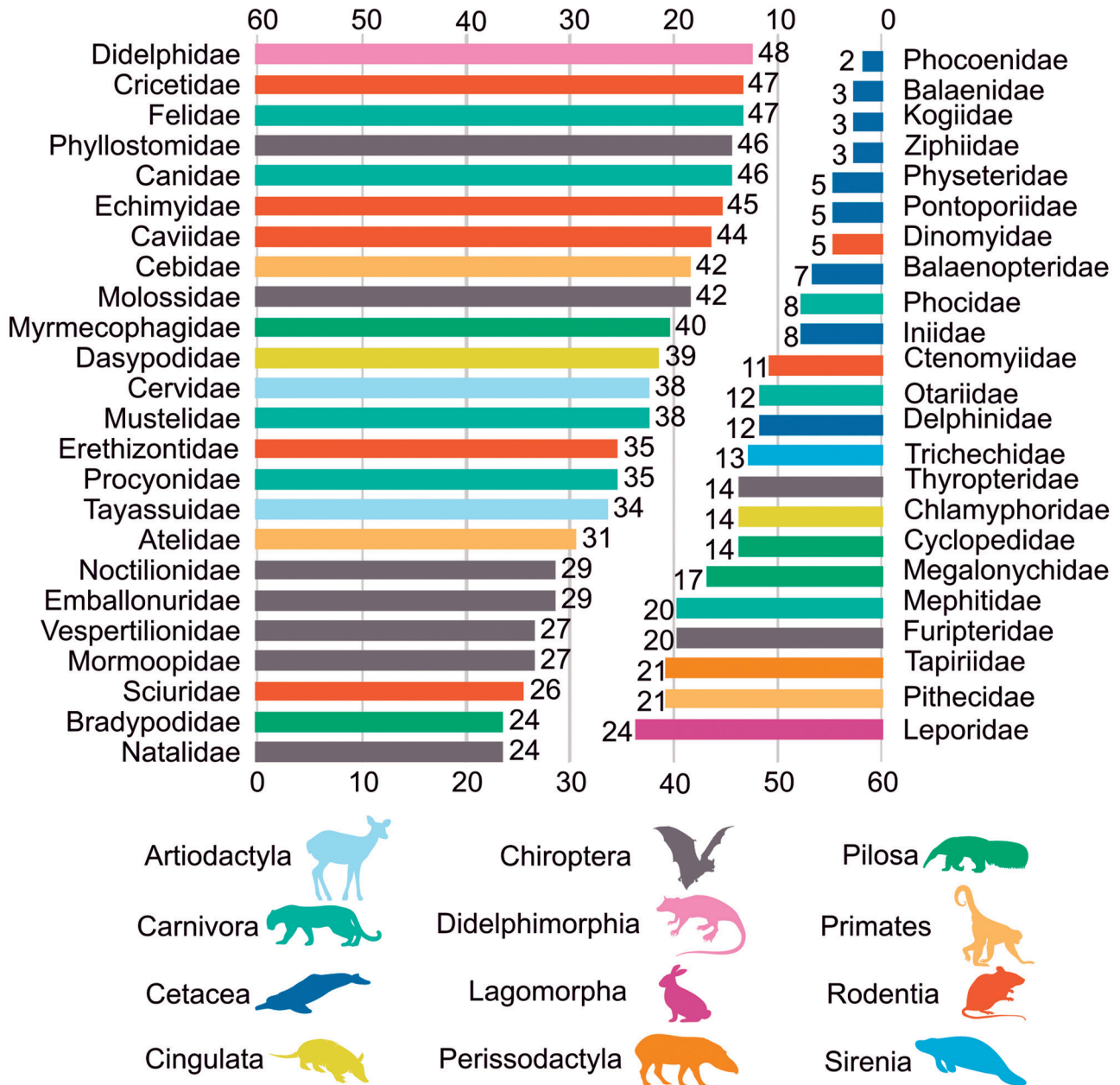
thousands of specimens could be vouchered in collections every year in Brazil (see Alvarez & Loretto, 2022, this volume). This would be feasible if road ecology studies were better integrated to local mammal collections. Often, these specimens are discarded due to their low anatomical integrity, but even “good specimens” are sometimes lost owing to the lack of integration between road ecology consultants and local mammal collections. We encourage improving this integration as it can contribute to a substantial increase in the number of voucher-specimens in Brazilian collections every year (specially in seldom collected taxa, usually medium and large mammals), and to proper vouchering of road ecology studies. Another often neglected source of specimens for collections are faunal rescue projects (removal of individuals trapped in islands or patches of unsubmerged land during the period of the flooding of the water reservoir) associated with large hydroelectric power dams, especially those developed in Amazonia. For instance, more than 200,000 mammal individuals were rescued during the flooding of the Tucuruí dam reservoir (Rodrigues & Oliveira, 2012), but the information on how many of the rescued animals were successfully reintroduced and how many died during the rescue operations is not available. Nevertheless, even if we assume a low mortality rate of 10% among the rescued animals, tens of thousands of mammal specimens could potentially be incorporated into scientific collections, given the impressive number of animals recovered. Therefore, a better integration between mammal collections and rescuing projects is also greatly needed, most importantly, to document the extent of the impacts of hydroelectric dams on mammal populations.

Regarding the representativeness of the Brazilian states in collections, a possible explanation of the wide



**Figure 9:** Treemap chart of the number of Brazilian collections that have accessioned specimens for each mammalian order. The number inside each rectangle indicates how many collections house specimens of that order, and the size of the rectangles represents the proportion of Brazilian collections that houses that order, proportionally.





**Figure 10:** Bar graph showing the number of Brazilian collections that have accessioned specimens for each mammalian family. Numbers indicate the number of collection houses specimens from that family. The colors indicate the order in which each of the families is inserted.

representativity of specimens from Pará state are: i) its large area of 1.2 million km<sup>2</sup>, encompassing several basins and habitats; ii) large portions of Amazon forest in western portion of the state accessible by road, making survey assessment easier and cheaper (e.g., Transamazônica road BR-230, Santarém-Cuiabá road BR-163); iii) presence of several large-scale projects, such as hydroelectric dams and mining industry (see <http://www.pac.gov.br/estado/pa>); iv) long term epidemiological studies conducted in the Pará state to evaluate malaria, yellow fever and other tropical diseases (<https://www.iec.gov.br/historia>; see also the catalogue of MPEG collection).

Among the families with good record at the collections, considering the number of specimens, we have Didelphidae, order Didelphimorphia; Cricetidae, Echimyidae, and Caviidae, order Rodentia; and Phyllostomyidae

and Molossidae, order Chiroptera. As specimen collection, preparation, examination and comparisons are essential for the proper species name assignment for these highly diverse groups (Patterson, 2002), field research on small mammals is usually followed by further examination of scientific collections. Therefore, families of the three above mentioned mammalian orders tend to be more common in scientific collections. They are also more common, as: i) there are more mammal research groups working on the systematics and ecology of small mammals (the most of papers published in 2021 on systematics and taxonomy of Brazilian mammals using collections is about rodents, bats or marsupials; see Brandão *et al.*, 2021; Byrne *et al.*, 2021; Caccavo & Weksler, 2021; Costa-Araujo *et al.*, 2021; Feijó & Anacleto, 2021; Guimarães *et al.*, 2021; Menezes *et al.*, 2021; Nascimento *et al.*, 2021; Prado *et al.*, 2021; Saldanha &



Rossi, 2021; Semedo *et al.*, 2021); ii) governmental environmental institutions issue more collecting permits for capture collect and transport of specimens of these orders, when compared to medium and large mammals (CCM-SBMz, personal observation).

Four families of medium-sized and large mammals are also well represented in most Brazilian collections, namely Canidae and Felidae, order Carnivora; Myrmecophagidae, order Pilosa; and Cebidae, order Primates. It is important to stress that our oldest institutions, *i.e.*, MNRJ, MZUSP, and MPEG, hold important collections of these taxa sampled during the first half of 20<sup>th</sup> century in scientific expeditions conducted by able field naturalists as Alfonso Olalla, Emilie Snethlage and Ernst Garbe, and sponsored by curators as João Moojen and Alípio de Miranda Ribeiro, among others (Ávila-Pires & Oliveira, 2014; Pinto, 1945).

It is also evident that strictly aquatic mammals (orders Cetacea and Sirenia) are represented in very few Brazilian collections, given the difficulty to deal with such large specimens, considering both the infrastructure to prepare them and the available collection space. These specimens are more frequent in older collections or in those that are both specialized to deal with large aquatic mammals, such as the “Grupo de Estudos de Mamíferos Aquáticos do Rio Grande do Sul” (GEMARS), in Rio Grande do Sul state, and the “Associação de Pesquisa e Preservação de Ecossistemas Aquáticos” (Aquisis), in Ceará state, or have specific projects to collect these specimens, such as “Grupo de Estudos de Mamíferos Aquáticos da Amazônia” (GEMAM) at MPEG, in Pará state, and “Instituto Nacional de Pesquisas da Amazônia” (INPA), in Amazonas state.

The results presented above summarize the first efforts of the CCM-SBMz to contribute to the knowledge of mammalian diversity in Brazil. The committee will continue monitoring the dynamics of mammal collections in Brazil, intending to refine the diagnostics on Brazilian collections focusing on details of the specimens (material available, precise collection localities, sex, age and other relevant information), and also providing a detailed taxonomic composition of the currently surveyed collections. We also aim to compile and generate bibliographic material on curatorial proceedings and techniques (part of this material is already available in our website <https://www.sbmz.org/comite-colecoes-mastozoologicas>). Finally, it is another goal to promote the digitization of information related to the Brazilian mammal collections.

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### Supplementary Information Online

Further information can be found at <https://www.sbmz.org>.

**Appendix S1.** Questionnaire for the survey of Brazilian mammal collections.

**Appendix S2.** Directory of Brazilian mammal collections containing 71 accounts.