Giovanni Amori*, Federica Chiozza, Bruce D. Patterson, Carlo Rondinini, Jan Schipper and Luca Luiselli

# Species richness and distribution of Neotropical rodents, with conservation implications

**Abstract:** The correlates of species richness and conservation status of South American rodents were studied by analyzing the ranges of 791 species (belonging to 159 genera and 16 families). The distribution data (size of each species' range in km$^2$) and the relative quantity of each macrohabitat type (in km$^2$) were obtained from the Global Mammal Assessment data bank of the International Union for Conservation of Nature (IUCN), and the Global Land Cover 2000, respectively. We excluded mainly island species from analyses but included those species that occur on both islands and the mainland. Habitats were grouped according to seven categories (shrubland, forest, grassland, savannah, wetlands, desert, and artificial). Mean range sizes varied significantly among families, with members of the family Cuniculidae having larger ranges than the species belonging to the rest of the families. Mean range size did not differ significantly between endemic and non-endemic taxa. There was a significant positive relation between total species richness and the availability of habitat types. Specialized species (i.e., those linked to a single habitat type) were found especially in forests, but shrublands and grasslands were also important. IUCN threatened species were distributed in a scattered way, and essentially in forests, grasslands, and shrublands. No region of the Neotropics housed more than two to three threatened taxa, apart from a spot in north-central Peru with five species. The richness of IUCN threatened species was higher in the montane forest ecosystems of the Andes, north-central Peru, than in other areas of South America. There was a mismatch between the hotspot maps for threatened and endemic species. The conservation implications of these patterns are discussed.

**Keywords:** conservation; correlates of distribution; macroecology; Rodentia; South America.

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## Introduction

Macroecological spatial diversity patterns are among the most intriguing issues in modern ecology and biogeography theories (e.g., Lennon et al. 2001, Koleff et al. 2003a). Hence, ecologists have spent considerable effort in distinguishing between different components of species diversity, including alpha or local diversity ($\alpha$), beta diversity or differentiation ($\beta$), and gamma or regional diversity ($\gamma$) (e.g., Lennon et al. 2001, Koleff et al. 2003a,b). The various components of species diversity have both biogeographic and ecological underpinnings, with the biogeographic aspects explaining taxonomic distinctiveness and/or endemism rates and ecological aspects explaining the reasons behind counts of the number of species in a given geographic area. It is well demonstrated that areas rich in endemics are often also species rich, although patterns in species richness and endemism are not always positively related (Ceballos and Brown 1995).

Several ecological and evolutionary hypotheses have been formulated during the last 200 years to explain geographic patterns in richness, with many hypotheses being conjectural or untestable. As a consequence, there is an increasing effort to reduce the number of hypotheses into a minimum set of testable and plausible ones (see Jetz and Rahbek 2001, Mittelbach et al. 2007, Terribile and Diniz-Filho 2009). Obviously, many factors may affect a species' geographic distribution (Whittaker et al. 2001, Anderson et al. 2002a, Hawkins et al. 2003a), and the extent of the main habitats suitable for a given species may play a considerable role in determining the extent of its geographic range (e.g., Anderson et al. 2002b, Hawkins et al. 2003a,b, Willig et al. 2003, Hawkins 2004).

Rodents are the most important group of mammals in terms of the number of species (Wilson and Reeder 2005), and they are widespread and very speciose in the Neotropics (Patterson 2000). A number of studies have examined the determinants of the species distribution of some select groups of South American rodents (e.g., Arita et al. 1997, Patterson 2000, Anderson et al. 2002a,b, Anderson and Martinez-Meyer 2004), and there is also an all-taxon study on the environmental correlates of species richness in mammals of South America (Ruggiero and Kitzberger 2004). Focusing on rodent species, we analyze in this article the geographic patterns of species richness and the richness of those species considered threatened by the International Union for Conservation of Nature (IUCN 2011) in South America and part of Central America also in relation to the various major habitat types (=vegetation zones), and discuss the conservation implications of our results.


**Figure 1** Map of the Neotropical biogeographic region (modified from Udvardy 1975), including the main macrohabitat types that have been used for the present study.

# Materials and methods

## Data sources

For this study, we included the Neotropical geographic region (*sensu* Udvardy 1975), including also central and northern Mexico but excluding the Caribbean islands and islets (Udvardy 1975; Figure 1). Northern Mexico, although not belonging to the Neotropical region, was included for practical reasons, as there is no clear demarcation between Neotropical and Nearctic Mexico in the distribution summaries of IUCN (2011). The Caribbean islands were excluded because most of the rodents are endemic or extinct and their distributions have been grossly altered by human settlement, both Amerindian and European (Morgan and Woods 1986, Dávalos and Turvey 2012). This would have greatly confounded the understanding of the main patterns relative to mainland South America. While we excluded strictly insular species from analyses, we nonetheless included those species that occur on both islands and the mainland.

Overall, we collated range-size data for 791 species belonging to 159 genera and 16 families (following the taxonomy adopted by IUCN 2011). Habitats were grouped according to seven categories, mapped using the GlobCover Land Cover v2 2008 database (2008): cultivated, forest, grassland, shrubland, artificial, and bare (=open areas) (Figure 1). However, for the conservation analyses, we split one category (forest) into two subcategories (dry forest, simply named as ‘forest’ and flooded forest, renamed as ‘flooded’) in order to more deeply evaluate the relative importance of the different types of forest at the continental level. The total availability of the various habitat categories across the study region (in $km^2$) was obtained from the GlobCover database (Table 1).

Distribution data for each species (size range in $km^2$) were obtained from the 2011 IUCN Red List (IUCN 2011). We removed from analyses those species that were not classified to defined habitat categories (i.e., unknown, other) in the original IUCN (2011) table, or that had an incomplete database. Thus, whereas for analyses of species richness we considered 791 species, for analyses of habitats we considered only 701 species. It should be noted that the IUCN Red List is updated every year, and especially for Rodentia it may be dated as new rodent species are continually

| Habitat category | Surface ($km^2$) |
|---|---|
| Cultivated | 2,608,656 |
| Forest (including flooded) | 11,519,657 |
| Grassland (including savannahs) | 1,675,596 |
| Shrubland | 3,412,028 |
| Artificial | 14,344 |
| Bare | 531,286 |

**Table 1** Relative availability of the various habitat categories across the studied region.
Data from the Global Land Cover 2000 database.

being described. Maps were generated using ArcGIS 10.0 (ESRI 2010).

## Statistical analyses

All data were checked for normality and homoscedasticity before any tests. When data were normally distributed (either with or without log transformation), parametric tests were used. Otherwise, non-parametric tests were used (Zar 1984). Levene's test was used to test for the parametric distribution of variables (Zar 1984).

Differences in mean range size among rodent families were tested by one-way univariate analyses of variance (ANOVAs) followed by Tukey honest significance *post hoc* tests. Welch ANOVA design was used when variances were heterogeneous. To evaluate whether species occurring in multiple habitat types had larger ranges than more specialized species, we ran a Spearman's rank correlation with the range extent of each species as the dependent variable, and the number of habitat types of occurrence for that species as the independent variable. For this analysis, we defined as 'specialized' those species that were restricted to a single habitat type.

It should be noted that geographic assignment of habitat associations may be imprecise, especially for habitat specialists living in diversified landscapes. For example, *Abrocoma uspallata* Braun and Mares, 2002 is thought to be a creosote specialist but was assigned to shrublands, savannahs, and flooded because all these habitats surround its known distribution. Detailed autecological studies are lacking for many of the species included in this analysis, so that the uniformity afforded by geographic land-cover assignments outweighs its imprecision.

# Results

The list of species included in this study, with their distribution extent and IUCN (2011) category, is given in Appendix 1. In terms of species richness, some main areas were identified (Figure 2): (i) Andean Yungas, (ii) Western Amazonia, (iii) Guianan forests, and (iv) Atlantic forests.

The mean sizes of the total ranges (in km$^2$) varied significantly among families (one-way ANOVA: $F_{14,763}$=6.482, p<0.000001) (Figure 3). Tukey HSD *post hoc* pairwise comparisons showed that members of the family Cuniculidae, particularly *Cuniculus paca* (Linnaeus 1766), had larger ranges than any other families, followed by Myocastoridae, Caviidae, Dasyproctidae, and Erethizontidae. Of

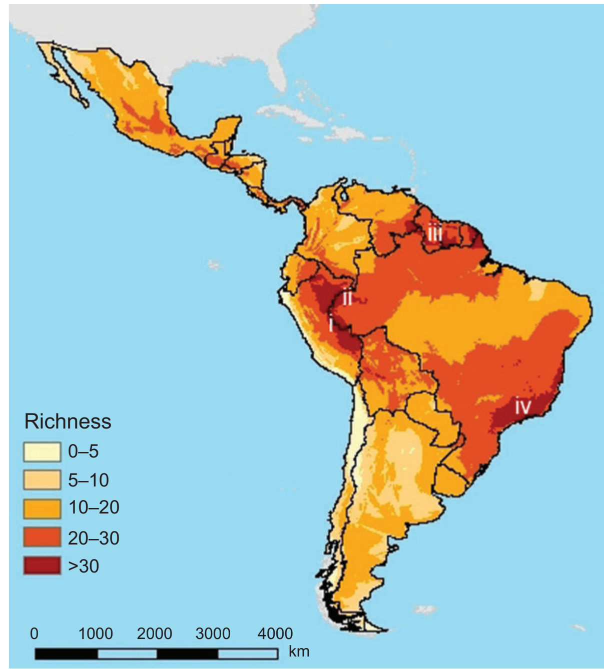


**Figure 2** Map of the Neotropical biogeographic region (modified from Udvardy 1975), showing the main areas of rodent species richness.
(i) Andean Yungas; (ii) Western Amazonia; (iii) Guianan lowlands; (iv) Brazilian Atlantic forests.

the five above-mentioned families, only the Erethizontidae were not endemic to the Neotropical region. However, closer inspection of the data revealed that mean range size did not differ significantly between endemic and non-endemic taxa (one-way ANOVA: $F_{1789}$=0.005, p=0.942). There was a significant positive relation between total species richness and the availability of habitat types (r=0.453, n=7, p<0.001).

Overall, the number of habitats occupied was positively influenced by range size (Spearman's r=0.243, n=791, p<0.0001). Species linked to a single habitat type were found more frequently in forests (n=224 species) than in other habitat types, with shrublands coming second (n=44) and grassland coming third (n=7) (overall: $\chi^2$=467.39, df=3, p<0.000001). Species occurring only in single habitat types differed significantly in mean range sizes (Welch ANOVA for unequal variances: $F_{3276}$=11.52, p<0.001), with forest-only species having larger range sizes (x=300,485.7±895,144 km$^2$, n=224) than those living in shrublands (x=168,535.5±274,314 km$^2$, n=44), grasslands (x=102,419.3±133,993 km$^2$, n=7), and bare (x=16,054.1±19,575 km$^2$, n=4). The range size of species inhabiting a single habitat type was not influenced by the relative availability of their preferred habitat types in the region under study (Monte Carlo regression with

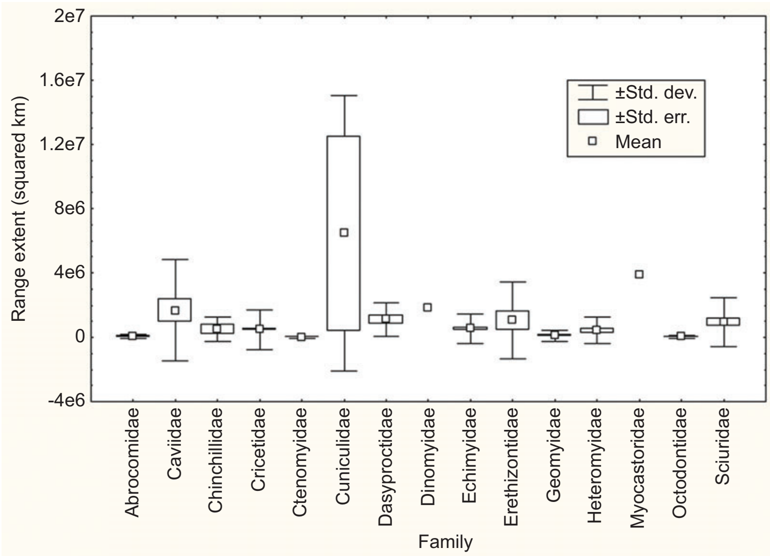


**Figure 3** Means and dispersion measures (S.D.) of the total range size of South American rodent species grouped by family. More statistical details in the text.

1000 iterations; observed r=0.13, mean of the simulated r=-0.006, simulated variance=0.0125, $p_{(obs.\leq exp.)}$=0.422, $p_{(obs.\geq exp.)}$=0.588).

IUCN threatened species were geographically scattered, with no area housing more than two to three taxa apart from an area in north-central Peru (Figure 4). Hence, the distribution of threatened taxa appeared to be mainly parapatric in the studied region. The richness of IUCN threatened species was higher (n=5) in the montane forest ecosystems of the Andes, north-central Peru, than in other areas of South America (Figure 4). There was an uneven distribution of the number of threatened species by habitat type (Monte Carlo $\chi^2$=93.05, 1000 random iterations done; mean of simulated values=13.76±28.17, p<0.000001). Overall, the forest, shrubland, and grassland habitat types housed the great majority of threatened taxa (Figure 5), with forest being the principal habitat type. There was a significant relation between the area of

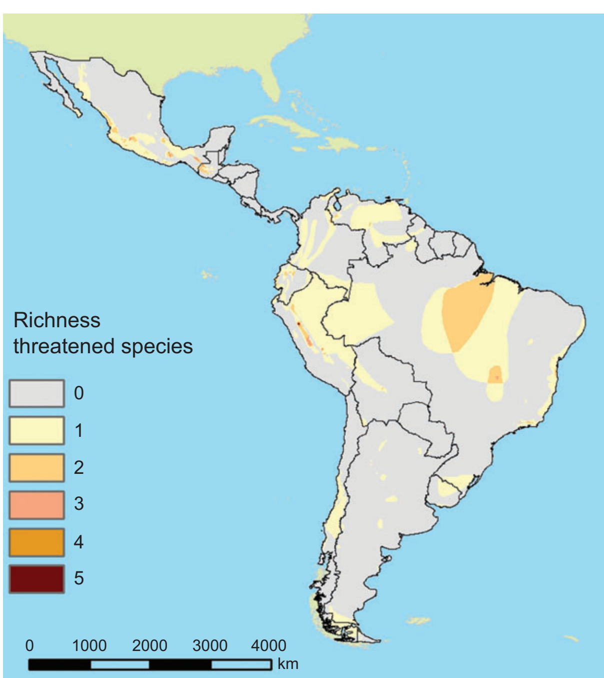


**Figure 4** Map of the Neotropical biogeographic region (modified from Udvardy 1975), showing the main areas of richness of threatened rodent species according to IUCN (2011) lists.

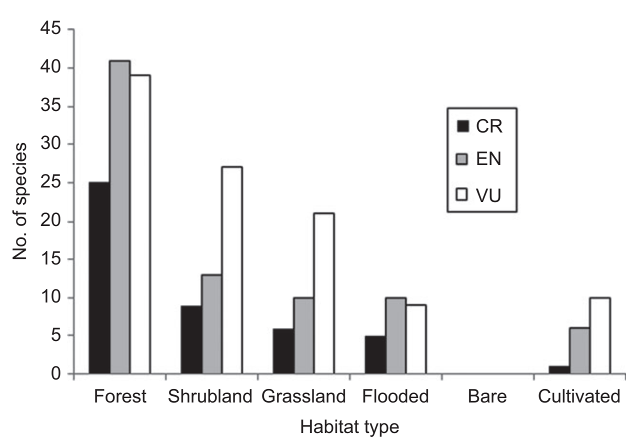


**Figure 5** Distribution of the number of threatened South American rodent species (according to IUCN 2011 Red listing) divided by habitat type.
VU, vulnerable; EN, endangered; CR, critically endangered. Note that in this graphic, the category 'Cultivated' also includes 'Artificial'.

each habitat type (in $km^2$) and the number of threatened species (Spearman's $r_s$=0.892, n=6, p=0.041).

## Discussion

A principal result of this study is the identification and delimitation of three main richness areas for South American rodents: the western margins of the Amazon Basin, the Guianan Shield, and the Brazilian Shield. Each of these areas is associated with ancient geological formations that have persisted as dry land despite the formation of epicontinental seas as recently as the Miocene (Campbell 1990, Hoorn 2006, Kaandorp et al. 2006, Velazco and Patterson 2008). In addition, each is adjacent to mountain chains offering an array of neighboring habitats and potential colonists: the Andes (and proto-Andes before they reached their present heights; Orme 2007) in the case of the western Amazon, the tepuis in the case of the Guianan Shield, and the Serra do Mar and adjacent high plateau in the case of the Brazilian Shield. As a result, each lies adjacent to a diverse and distinctive center of mammalian endemism (Solari et al. 2012), forming a kind of biological ecotone. The western Amazon is populated mainly by lowland forest species (Amazonian region); however, its richness is enhanced by Andean versant species such as *Sciurus ignitus* (Gray 1867) and *Neacomys spinosus* (Thomas 1882) that extend far into the basin (IUCN 2011). Similarly, the Guianan Shield is populated by a diversity of Amazonian taxa with widespread distributions, coupled with an admixture of highland endemics that in many cases have Andean affinities (Lim 2012). The Brazilian Shield harbors a diverse collection of Atlantic Forest and montane endemics (Costa et al. 2000, Carmignotto et al. 2012), but also includes the open and savannah formations of the Cerrado, South America's second most extensive biome (Eiten 1972). Surprisingly, the Brazilian Atlantic forests do not harbor a remarkable diversity of threatened rodent taxa, in contrast with other vertebrate taxa (Fonseca 1985, Brown and Brown 1992, Chiarello 1999). This is apparently due to the low overlap in the respective ranges of the threatened taxa (for instance, the genus *Chaetomys*), which are in general characterized by very narrow ranges. Hence, the cumulative number of threatened taxa is high but their spatial overlap is low across this region. Low overlaps in the ranges of threatened taxa were also observed for the rest of the South American territory, thus resulting in a generally low richness of threatened taxa by region (Figure 4).

We also showed that shrublands, grasslands, and forests are in general the principal habitat types for South American rodents, and that the forest-specialist species tended to have wider ranges than those inhabiting only shrublands or grasslands. This evidence is in contrast with Rapoport's (1982) rule, which predicts smaller ranges at the equator where forests predominate. However, it should be stressed that the Rapoport's rule is a generally local phenomenon (Rohde 1996), restricted to the Palaearctic and Nearctic above a latitude of approximately 40–50°N, and cannot be applied to the tropics (but see Amori et al. 2009a,b, Amori et al. 2010 for different conclusions on Sciuridae genera). We suggest that the relatively homogeneous structure of the Amazon forest may explain the large ranges of forest rodents in South America. Indeed, several studies pointed out that the Amazonia is ecologically so uniform that present-day ecological conditions are rather insignificant in determining species distribution patterns and speciation (Tuomisto and Ruokolainen 1997). It is noteworthy that in another study, on the basis of entirely different methods, habitat heterogeneity was considered to be a main driver of species richness among South American mammals (Ruggiero and Kitzberger 2004).

Our study also pointed out that habitat availability also positively influenced rodent species richness, thus being consistent with the general rules of species-area relations (e.g., Palmer and White 1994, Hanski and Gyllenberg 1997). Although our study provided evidence that shrublands and grasslands have considerable relevance, it is also evident that forests housed the great majority of threatened rodent species. Thus, it is clear that conservationists should focus their attention mainly on the forest habitat type, including of course the montane forests of the Andes. Nonetheless, focusing our conservation efforts to the habitat mosaics 'forest-grassland-shrubland' may probably be very effective in accurately preserving most of the vulnerable rodent diversity of South America. In this regard, it would be mentioned, however, that the apparent prominence of threatened rodent diversity into forests could be also due to (i) the wider distribution of the forests relative to other habitat types, and (ii) the fact that the forest biomes have been until today more studied than the other biomes with shrub and open habitats, at least in South America. This latter hypothesis is, however, unlikely, given the very active mammalogy programs of Argentina and Chile. In addition, the patterns of species discovery (especially in the yungas of Peru and Ecuador) also argue otherwise (see Voss 2003, Patterson et al. 2012).

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# Appendix

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Abrocomidae | *Abrocoma* | *bennettii* | LC | 54,855.38 | 1 |
| Abrocomidae | *Abrocoma* | *vaccarum* | DD | 37.18 | 4 |
| Abrocomidae | *Abrocoma* | *boliviensis* | CR | 64.74 | 23 |
| Abrocomidae | *Abrocoma* | *budini* | DD | 405.50 | 34 |
| Abrocomidae | *Abrocoma* | *cinerea* | LC | 443,829.09 | 34 |
| Abrocomidae | *Abrocoma* | *famatina* | DD | 3306.52 | 34 |
| Abrocomidae | *Abrocoma* | *schistacea* | DD | 715.16 | 34 |
| Abrocomidae | *Abrocoma* | *uspallata* | DD | 14.32 | 145 |
| Abrocomidae | *Cuscomys* | *ashaninka* | DD | 44.23 | 2 |
| Caviidae | *Dolichotis* | *salinicola* | LC | 575,693.97 | 5 |
| Caviidae | *Cavia* | *fulgida* | LC | 293,747.55 | 24 |
| Caviidae | *Cavia* | *magna* | LC | 50,054.72 | 24 |
| Caviidae | *Cavia* | *tschudii* | LC | 632,826.82 | 246 |
| Caviidae | *Cavia* | *aperea* | LC | 7,003,978.95 | 345 |
| Caviidae | *Dolichotis* | *patagonum* | NT | 1,030,502.13 | 124 |
| Caviidae | *Galea* | *musteloides* | LC | 1,925,425.37 | 14 |
| Caviidae | *Galea* | *flavidens* | LC | 146,910.79 | 35 |
| Caviidae | *Galea* | *spixii* | LC | 2,836,451.08 | 35 |
| Caviidae | *Hydrochoerus* | *isthmius* | DD | 298,961.23 | 26 |
| Caviidae | *Hydrochoerus* | *hydrochaeris* | LC | 12,393,875.86 | 256 |
| Caviidae | *Kerodon* | *rupestris* | LC | 1,172,999.06 | 35 |
| Caviidae | *Kerodon* | *acrobata* | DD | 3708.56 | 235 |
| Caviidae | *Microcavia* | *niata* | LC | 202,933.59 | 46 |
| Caviidae | *Microcavia* | *shiptoni* | NT | 20,783.34 | 48 |
| Caviidae | *Microcavia* | *australis* | LC | 1,516,544.82 | 257 |
| Chinchillidae | *Lagidium* | *peruanum* | LC | 370,954.56 | 3 |
| Chinchillidae | *Lagidium* | *viscacia* | LC | 762,822.31 | 3 |
| Chinchillidae | *Lagidium* | *wolffsohni* | DD | 11,213.32 | 3 |
| Chinchillidae | *Chinchilla* | *lanigera* | CR | 2070.28 | 13 |
| Chinchillidae | *Chinchilla* | *chinchilla* | CR | 11,943.02 | 34 |
| Chinchillidae | *Lagostomus* | *maximus* | LC | 1,988,086.68 | 457 |
| Cricetidae | *Abrawayaomys* | *ruschii* | LC | 7947.73 | 2 |
| Cricetidae | *Abrothrix* | *illuteus* | NT | 35,267.93 | 2 |
| Cricetidae | *Abrothrix* | *markhami* | LC | 6091.15 | 2 |
| Cricetidae | *Abrothrix* | *sanborni* | NT | 22,140.43 | 2 |
| Cricetidae | *Abrothrix* | *lanosus* | LC | 40,594.09 | 12 |
| Cricetidae | *Abrothrix* | *andinus* | LC | 612,703.70 | 14 |
| Cricetidae | *Abrothrix* | *hershkovitzi* | LC | 281.17 | 26 |
| Cricetidae | *Abrothrix* | *jelskii* | LC | 498,019.62 | 1348 |
| Cricetidae | *Abrothrix* | *longipilis* | LC | 717,944.26 | 1246 |
| Cricetidae | *Abrothrix* | *olivaceus* | LC | 1,083,376.85 | 124 |
| Cricetidae | *Aegialomys* | *xanthaeolus* | LC | 258,914.46 | 1278 |
| Cricetidae | *Aepeomys* | *lugens* | LC | 9497.29 | 124 |
| Cricetidae | *Aepeomys* | *reigi* | VU | 5527.84 | 124 |
| Cricetidae | *Akodon* | *aerosus* | LC | 114,173.55 | 248 |
| Cricetidae | *Akodon* | *affinis* | LC | 42,194.84 | 28 |
| Cricetidae | *Akodon* | *albiventer* | LC | 402,031.20 | 48 |
| Cricetidae | *Akodon* | *aliquantulus* | DD | 482.07 | 4 |
| Cricetidae | *Akodon* | *azarae* | LC | 1,227,619.52 | 126 |
| Cricetidae | *Akodon* | *bogotensis* | LC | 60,127.39 | 248 |
| Cricetidae | *Akodon* | *boliviensis* | LC | 217,523.13 | 148 |
| Cricetidae | *Akodon* | *budini* | LC | 19,875.90 | 2 |
| Cricetidae | *Akodon* | *cursor* | LC | 824,312.28 | 2 |
| Cricetidae | *Akodon* | *dayi* | LC | 289,349.54 | 248 |
| Cricetidae | *Akodon* | *dolores* | LC | 54,979.73 | 1 |
| Cricetidae | *Akodon* | *fumeus* | LC | 151,083.68 | 1248 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Cricetidae | *Akodon* | *iniscatus* | LC | 573,428.25 | 1248 |
| Cricetidae | *Akodon* | *juninensis* | LC | 115,443.54 | 48 |
| Cricetidae | *Akodon* | *kofordi* | LC | 13,610.45 | 1234 |
| Cricetidae | *Akodon* | *latebricola* | VU | 5994.65 | 124 |
| Cricetidae | *Akodon* | *leucolimnaeus* | DD | 336.59 | 4 |
| Cricetidae | *Akodon* | *lindberghi* | DD | 6824.02 | 4 |
| Cricetidae | *Akodon* | *lutescens* | LC | 177,992.51 | 12468 |
| Cricetidae | *Akodon* | *mimus* | LC | 57,422.78 | 28 |
| Cricetidae | *Akodon* | *molinae* | LC | 429,206.15 | 138 |
| Cricetidae | *Akodon* | *mollis* | LC | 265,417.52 | 148 |
| Cricetidae | *Akodon* | *montensis* | LC | 1,050,553.53 | 256 |
| Cricetidae | *Akodon* | *mystax* | DD | 470.56 | 146 |
| Cricetidae | *Akodon* | *neocenus* | DD | 35,745.91 | 14 |
| Cricetidae | *Akodon* | *oenos* | DD | 941.89 | 17 |
| Cricetidae | *Akodon* | *orophilus* | LC | 33,885.90 | 1248 |
| Cricetidae | *Akodon* | *paranaensis* | LC | 323,453.10 | 2 |
| Cricetidae | *Akodon* | *pervalens* | DD | 29,100.43 | 12 |
| Cricetidae | *Akodon* | *philipmyersi* | DD | 2113.68 | 124 |
| Cricetidae | *Akodon* | *reigi* | LC | 65,883.53 | 26 |
| Cricetidae | *Akodon* | *sanctipaulensis* | DD | 758.20 | 14 |
| Cricetidae | *Akodon* | *serrensis* | LC | 276,085.74 | 2 |
| Cricetidae | *Akodon* | *siberiae* | NT | 32,141.03 | 2 |
| Cricetidae | *Akodon* | *simulator* | LC | 156,795.27 | 124 |
| Cricetidae | *Akodon* | *spegazzinii* | LC | 56,731.75 | 24 |
| Cricetidae | *Akodon* | *subfuscus* | LC | 170,890.24 | 248 |
| Cricetidae | *Akodon* | *surdus* | VU | 15,831.52 | 2 |
| Cricetidae | *Akodon* | *sylvanus* | LC | 39,317.76 | 24 |
| Cricetidae | *Akodon* | *toba* | LC | 443,667.53 | 1 |
| Cricetidae | *Akodon* | *torques* | LC | 66,655.10 | 1248 |
| Cricetidae | *Akodon* | *varius* | DD | 244,626.29 | 12 |
| Cricetidae | *Amphinectomys* | *savamis* | DD | 991.19 | 26 |
| Cricetidae | *Andalgalomys* | *olrogi* | LC | 57,113.12 | 1 |
| Cricetidae | *Andalgalomys* | *pearsoni* | LC | 139,013.47 | 4 |
| Cricetidae | *Andinomys* | *edax* | LC | 228,610.36 | 148 |
| Cricetidae | *Anotomys* | *leander* | VU | 6989.74 | 246 |
| Cricetidae | *Auliscomys* | *boliviensis* | LC | 210,617.12 | 1346 |
| Cricetidae | *Auliscomys* | *pictus* | LC | 309,575.48 | 1348 |
| Cricetidae | *Auliscomys* | *sublimis* | LC | 393,458.69 | 134 |
| Cricetidae | *Bibimys* | *chacoensis* | LC | 27,944.43 | 1 |
| Cricetidae | *Bibimys* | *labiosus* | LC | 361,605.07 | 2 |
| Cricetidae | *Bibimys* | *torresi* | NT | 4381.17 | 46 |
| Cricetidae | *Blarinomys* | *breviceps* | LC | 437,137.28 | 2 |
| Cricetidae | *Brucepattersonius* | *albinasus* | DD | 312.08 | 2 |
| Cricetidae | *Brucepattersonius* | *griserufescens* | DD | 12,637.11 | 2 |
| Cricetidae | *Brucepattersonius* | *guarani* | DD | 1540.06 | 2 |
| Cricetidae | *Brucepattersonius* | *igniventris* | DD | 13,350.77 | 2 |
| Cricetidae | *Brucepattersonius* | *iheringi* | LC | 178,516.22 | 28 |
| Cricetidae | *Brucepattersonius* | *misionensis* | DD | 1517.22 | 2 |
| Cricetidae | *Brucepattersonius* | *paradisus* | DD | 1223.81 | 23 |
| Cricetidae | *Brucepattersonius* | *soricinus* | DD | 15,508.22 | 2 |
| Cricetidae | *Calomys* | *boliviae* | LC | 72,104.40 | 2 |
| Cricetidae | *Calomys* | *callidus* | LC | 55,935.80 | 1 |
| Cricetidae | *Calomys* | *callosus* | LC | 3,145,719.96 | 148 |
| Cricetidae | *Calomys* | *expulsus* | LC | 1,360,005.64 | 158 |
| Cricetidae | *Calomys* | *fecundus* | LC | 54,306.21 | 28 |
| Cricetidae | *Calomys* | *hummelincki* | VU | 312,461.02 | 458 |
| Cricetidae | *Calomys* | *laucha* | LC | 1,437,895.89 | 1248 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Cricetidae | *Calomys* | *lepidus* | LC | 584,185.24 | 34 |
| Cricetidae | *Calomys* | *musculinus* | LC | 2,024,418.25 | 18 |
| Cricetidae | *Calomys* | *sorellus* | LC | 244,088.45 | 1248 |
| Cricetidae | *Calomys* | *tener* | LC | 1,710,305.23 | 148 |
| Cricetidae | *Calomys* | *tocantinsi* | LC | 132,797.92 | 124 |
| Cricetidae | *Cerradomys* | *andersoni* | DD | 852.01 | 145 |
| Cricetidae | *Cerradomys* | *maracajuensis* | LC | 963,352.90 | 268 |
| Cricetidae | *Cerradomys* | *marinhus* | DD | 13,493.48 | 145 |
| Cricetidae | *Cerradomys* | *scotti* | LC | 1,644,082.60 | 1458 |
| Cricetidae | *Cerradomys* | *subflavus* | LC | 1,461,169.54 | 28 |
| Cricetidae | *Chelemys* | *delfini* | DD | 530.12 | 14 |
| Cricetidae | *Chelemys* | *macronyx* | LC | 322,053.21 | 124 |
| Cricetidae | *Chelemys* | *megalonyx* | NT | 119,249.35 | 1 |
| Cricetidae | *Chibchanomys* | *orcesi* | DD | 2,776.44 | 46 |
| Cricetidae | *Chibchanomys* | *trichotis* | DD | 29,805.92 | 46 |
| Cricetidae | *Chilomys* | *instans* | LC | 197,765.46 | 2 |
| Cricetidae | *Chinchillula* | *sahamae* | LC | 160,701.44 | 13 |
| Cricetidae | *Delomys* | *collinus* | LC | 88,365.39 | 24 |
| Cricetidae | *Delomys* | *dorsalis* | LC | 292,213.87 | 2 |
| Cricetidae | *Delomys* | *sublineatus* | LC | 150,911.45 | 2 |
| Cricetidae | *Deltamys* | *kempi* | LC | 139,078.22 | 46 |
| Cricetidae | *Eligmodontia* | *moreni* | LC | 46,843.32 | 17 |
| Cricetidae | *Eligmodontia* | *morgani* | LC | 371,771.93 | 14 |
| Cricetidae | *Eligmodontia* | *puerulus* | LC | 447,131.82 | 14 |
| Cricetidae | *Eligmodontia* | *typus* | LC | 923,196.30 | 147 |
| Cricetidae | *Eremoryzomys* | *polius* | DD | 14,289.81 | 28 |
| Cricetidae | *Euneomys* | *chinchilloides* | DD | 76,638.38 | 12 |
| Cricetidae | *Euneomys* | *fossor* | DD | 9894.19 | 1 |
| Cricetidae | *Euneomys* | *mordax* | LC | 52,343.62 | 4 |
| Cricetidae | *Euneomys* | *petersoni* | LC | 591,129.99 | 134 |
| Cricetidae | *Euryoryzomys* | *emmonsae* | DD | 240,642.55 | 2 |
| Cricetidae | *Euryoryzomys* | *lamia* | EN | 122,790.72 | 25 |
| Cricetidae | *Euryoryzomys* | *legatus* | LC | 64,124.64 | 2 |
| Cricetidae | *Euryoryzomys* | *macconnelli* | LC | 4,294,741.43 | 2 |
| Cricetidae | *Euryoryzomys* | *nitidus* | LC | 1,305,117.76 | 28 |
| Cricetidae | *Euryoryzomys* | *russatus* | LC | 1,009,797.25 | 2 |
| Cricetidae | *Galenomys* | *garleppi* | DD | 19,189.66 | 4 |
| Cricetidae | *Geoxus* | *valdivianus* | LC | 232,669.84 | 12 |
| Cricetidae | *Graomys* | *domorum* | LC | 101,510.45 | 24 |
| Cricetidae | *Graomys* | *edithae* | DD | 408.06 | 4 |
| Cricetidae | *Graomys* | *griseoflavus* | LC | 2,012,535.42 | 1 |
| Cricetidae | *Habromys* | *chinanteco* | CR | 21.98 | 2 |
| Cricetidae | *Habromys* | *delicatulus* | CR | 18.34 | 2 |
| Cricetidae | *Habromys* | *ixtlani* | CR | 92.15 | 2 |
| Cricetidae | *Habromys* | *lepturus* | CR | 94.95 | 2 |
| Cricetidae | *Habromys* | *lophurus* | NT | 25,199.32 | 2 |
| Cricetidae | *Habromys* | *schmidlyi* | CR | 90.34 | 2 |
| Cricetidae | *Habromys* | *simulatus* | EN | 1451.40 | 2 |
| Cricetidae | *Handleyomys* | *chapmani* | LC | 36,275.81 | 2 |
| Cricetidae | *Handleyomys* | *fuscatus* | LC | 79,252.83 | 28 |
| Cricetidae | *Handleyomys* | *intectus* | LC | 9776.92 | 28 |
| Cricetidae | *Handleyomys* | *melanotis* | LC | 138,366.76 | 2 |
| Cricetidae | *Handleyomys* | *rhabdops* | VU | 8208.61 | 2 |
| Cricetidae | *Handleyomys* | *rostratus* | LC | 548,410.11 | 28 |
| Cricetidae | *Handleyomys* | *saturatior* | NT | 108,654.66 | 2 |
| Cricetidae | *Hodomys* | *alleni* | LC | 214,195.02 | 1 |
| Cricetidae | *Holochilus* | *brasiliensis* | LC | 2,878,844.39 | 268 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---:|---:|
| Cricetidae | *Holochilus* | *chacarius* | LC | 766,912.83 | 16 |
| Cricetidae | *Holochilus* | *sciureus* | LC | 9,319,251.59 | 46 |
| Cricetidae | *Hylaeamys* | *acritus* | DD | 88,936.93 | 1245 |
| Cricetidae | *Hylaeamys* | *laticeps* | NT | 173,883.97 | 2 |
| Cricetidae | *Hylaeamys* | *megacephalus* | LC | 5,970,945.45 | 28 |
| Cricetidae | *Hylaeamys* | *oniscus* | VU | 19,678.49 | 2 |
| Cricetidae | *Hylaeamys* | *perenensis* | LC | 1,991,799.14 | 2468 |
| Cricetidae | *Hylaeamys* | *tatei* | DD | 2652.41 | 2 |
| Cricetidae | *Hylaeamys* | *yunganus* | LC | 5,299,472.10 | 28 |
| Cricetidae | *Ichthyomys* | *hydrobates* | NT | 151,154.41 | 268 |
| Cricetidae | *Ichthyomys* | *pittieri* | VU | 5459.89 | 26 |
| Cricetidae | *Ichthyomys* | *stolzmanni* | DD | 4513.47 | 2 |
| Cricetidae | *Ichthyomys* | *tweedii* | DD | 7181.82 | 26 |
| Cricetidae | *Irenomys* | *tarsalis* | LC | 145,043.44 | 12 |
| Cricetidae | *Isthmomys* | *flavidus* | NT | 6470.36 | 2 |
| Cricetidae | *Isthmomys* | *pirrensis* | LC | 5206.20 | 2 |
| Cricetidae | *Juliomys* | *pictipes* | LC | 437,830.88 | 2 |
| Cricetidae | *Juliomys* | *rimofrons* | VU | 296.44 | 2 |
| Cricetidae | *Juscelinomys* | *guaporensis* | DD | 33.63 | 45 |
| Cricetidae | *Juscelinomys* | *huanchacae* | DD | 140.97 | 45 |
| Cricetidae | *Kunsia* | *fronto* | EN | 2,158.68 | 56 |
| Cricetidae | *Kunsia* | *tomentosus* | LC | 405,933.09 | 4 |
| Cricetidae | *Lenoxus* | *apicalis* | LC | 32,875.59 | 28 |
| Cricetidae | *Loxodontomys* | *micropus* | LC | 447,676.52 | 1 |
| Cricetidae | *Loxodontomys* | *pikumche* | LC | 51,057.45 | 1 |
| Cricetidae | *Lundomys* | *molitor* | LC | 295,581.45 | 246 |
| Cricetidae | *Megadontomys* | *cryophilus* | EN | 1,540.70 | 2 |
| Cricetidae | *Megadontomys* | *nelsoni* | EN | 4981.21 | 2 |
| Cricetidae | *Megadontomys* | *thomasi* | EN | 271.89 | 2 |
| Cricetidae | *Melanomys* | *caliginosus* | LC | 748,145.23 | 2 |
| Cricetidae | *Melanomys* | *robustulus* | LC | 22,782.36 | 2 |
| Cricetidae | *Melanomys* | *zunigae* | CR | 228.85 | 17 |
| Cricetidae | *Microakodontomys* | *transitorius* | VU | 1750.13 | 14 |
| Cricetidae | *Microryzomys* | *altissimus* | LC | 201,792.40 | 4 |
| Cricetidae | *Microryzomys* | *minutus* | LC | 638,220.51 | 234 |
| Cricetidae | *Microtus* | *guatemalensis* | NT | 23,886.94 | 2 |
| Cricetidae | *Microtus* | *mexicanus* | LC | 854,501.41 | 2 |
| Cricetidae | *Microtus* | *oaxacensis* | EN | 640.17 | 2 |
| Cricetidae | *Microtus* | *quasiater* | NT | 29,255.58 | 246 |
| Cricetidae | *Microtus* | *umbrosus* | EN | 1816.62 | 2 |
| Cricetidae | *Mindomys* | *hammondi* | EN | 4422.73 | 2 |
| Cricetidae | *Neacomys* | *dubosti* | LC | 221,431.79 | 28 |
| Cricetidae | *Neacomys* | *guianae* | LC | 319,485.10 | 2 |
| Cricetidae | *Neacomys* | *minutus* | LC | 183,729.25 | 2 |
| Cricetidae | *Neacomys* | *musseri* | LC | 140,338.25 | 2 |
| Cricetidae | *Neacomys* | *paracou* | LC | 955,489.22 | 2 |
| Cricetidae | *Neacomys* | *pictus* | DD | 484.14 | 2 |
| Cricetidae | *Neacomys* | *spinosus* | LC | 3,102,230.81 | 28 |
| Cricetidae | *Neacomys* | *tenuipes* | LC | 224,159.04 | 2 |
| Cricetidae | *Necromys* | *amoenus* | LC | 164,455.76 | 148 |
| Cricetidae | *Necromys* | *benefactus* | LC | 386,555.86 | 14 |
| Cricetidae | *Necromys* | *lactens* | LC | 163,775.06 | 148 |
| Cricetidae | *Necromys* | *lasiurus* | LC | 5,616,837.77 | 2458 |
| Cricetidae | *Necromys* | *lenguarum* | LC | 592,289.59 | 1458 |
| Cricetidae | *Necromys* | *obscurus* | NT | 31,839.69 | 46 |
| Cricetidae | *Necromys* | *punctulatus* | DD | 77,904.94 | 124 |
| Cricetidae | *Necromys* | *temchuki* | LC | 104,116.83 | 24 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---:|---:|
| Cricetidae | *Necromys* | *urichi* | LC | 339,603.37 | 28 |
| Cricetidae | *Nectomys* | *apicalis* | LC | 1,077,499.18 | 246 |
| Cricetidae | *Nectomys* | *magdalenae* | DD | 46,771.30 | 26 |
| Cricetidae | *Nectomys* | *palmipes* | LC | 165,517.37 | 268 |
| Cricetidae | *Nectomys* | *rattus* | LC | 7,114,447.90 | 124568 |
| Cricetidae | *Nectomys* | *squamipes* | LC | 2,344,405.45 | 6 |
| Cricetidae | *Nelsonia* | *goldmani* | EN | 2039.61 | 2 |
| Cricetidae | *Neotoma* | *albigula* | LC | 834,317.99 | 1237 |
| Cricetidae | *Neotoma* | *angustapalata* | EN | 3326.76 | 2 |
| Cricetidae | *Neotoma* | *chrysomelas* | LC | 30,203.17 | 23 |
| Cricetidae | *Neotoma* | *leucodon* | LC | 1,076,912.40 | 137 |
| Cricetidae | *Neotoma* | *mexicana* | LC | 1,784,438.54 | 23 |
| Cricetidae | *Neotoma* | *micropus* | LC | 1,063,787.84 | 1 |
| Cricetidae | *Neotoma* | *nelsoni* | CR | 92.98 | 2 |
| Cricetidae | *Neotoma* | *phenax* | NT | 42,612.79 | 2 |
| Cricetidae | *Neotomodon* | *alstoni* | LC | 27,485.14 | 2 |
| Cricetidae | *Neotomys* | *ebriosus* | LC | 688,511.06 | 146 |
| Cricetidae | *Nephelomys* | *albigularis* | LC | 398,229.71 | 2 |
| Cricetidae | *Nephelomys* | *auriventer* | LC | 14,415.64 | 24 |
| Cricetidae | *Nephelomys* | *caracolus* | LC | 4076.92 | 2 |
| Cricetidae | *Nephelomys* | *devius* | LC | 9591.18 | 2 |
| Cricetidae | *Nephelomys* | *keaysi* | LC | 66,985.65 | 2 |
| Cricetidae | *Nephelomys* | *levipes* | LC | 157,161.98 | 2 |
| Cricetidae | *Nephelomys* | *meridensis* | LC | 14,353.22 | 2 |
| Cricetidae | *Neusticomys* | *ferreirai* | DD | 683.19 | 2 |
| Cricetidae | *Neusticomys* | *monticolus* | LC | 65,827.71 | 26 |
| Cricetidae | *Neusticomys* | *mussoi* | EN | 4928.14 | 26 |
| Cricetidae | *Neusticomys* | *oyapocki* | DD | 70,807.25 | 26 |
| Cricetidae | *Neusticomys* | *peruviensis* | LC | 14,429.01 | 26 |
| Cricetidae | *Neusticomys* | *venezuelae* | VU | 109,414.16 | 26 |
| Cricetidae | *Notiomys* | *edwardsii* | LC | 267,119.73 | 134 |
| Cricetidae | *Nyctomys* | *sumichrasti* | LC | 673,104.83 | 2 |
| Cricetidae | *Oecomys* | *auyantepui* | LC | 1,088,881.12 | 2 |
| Cricetidae | *Oecomys* | *bicolor* | LC | 8,594,000.35 | 2 |
| Cricetidae | *Oecomys* | *catherinae* | LC | 3,492,948.24 | 1456 |
| Cricetidae | *Oecomys* | *cleberi* | DD | 6483.03 | 26 |
| Cricetidae | *Oecomys* | *concolor* | LC | 4,925,508.02 | 2 |
| Cricetidae | *Oecomys* | *flavicans* | LC | 42,578.65 | 2 |
| Cricetidae | *Oecomys* | *mamorae* | LC | 651,935.24 | 1258 |
| Cricetidae | *Oecomys* | *paricola* | DD | 392,838.73 | 2 |
| Cricetidae | *Oecomys* | *phaeotis* | LC | 117,455.52 | 2 |
| Cricetidae | *Oecomys* | *rex* | LC | 515,092.46 | 28 |
| Cricetidae | *Oecomys* | *roberti* | LC | 3,726,862.48 | 28 |
| Cricetidae | *Oecomys* | *rutilus* | LC | 1,186,671.64 | 28 |
| Cricetidae | *Oecomys* | *speciosus* | LC | 380,155.41 | 2 |
| Cricetidae | *Oecomys* | *superans* | LC | 1,547,654.60 | 8 |
| Cricetidae | *Oecomys* | *trinitatis* | LC | 4,830,363.92 | 2 |
| Cricetidae | *Oligoryzomys* | *andinus* | LC | 260,996.13 | 18 |
| Cricetidae | *Oligoryzomys* | *arenalis* | LC | 96,937.65 | 17 |
| Cricetidae | *Oligoryzomys* | *brendae* | DD | 161.57 | 2 |
| Cricetidae | *Oligoryzomys* | *chacoensis* | LC | 760,948.09 | 14 |
| Cricetidae | *Oligoryzomys* | *delticola* | LC | 371,885.72 | 14 |
| Cricetidae | *Oligoryzomys* | *destructor* | LC | 661,044.59 | 24 |
| Cricetidae | *Oligoryzomys* | *eliurus* | LC | 2,261,092.41 | 124 |
| Cricetidae | *Oligoryzomys* | *flavescens* | LC | 3,150,684.09 | 14 |
| Cricetidae | *Oligoryzomys* | *fornesi* | LC | 1,735,414.58 | 145 |
| Cricetidae | *Oligoryzomys* | *fulvescens* | LC | 2,895,262.93 | 2 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Cricetidae | *Oligoryzomys* | *griseolus* | LC | 52,671.26 | 24 |
| Cricetidae | *Oligoryzomys* | *longicaudatus* | LC | 629,004.92 | 124 |
| Cricetidae | *Oligoryzomys* | *magellanicus* | LC | 135,941.99 | 2 |
| Cricetidae | *Oligoryzomys* | *microtis* | LC | 2,722,327.53 | 28 |
| Cricetidae | *Oligoryzomys* | *moojeni* | DD | 180,602.54 | 25 |
| Cricetidae | *Oligoryzomys* | *nigripes* | LC | 3,214,873.69 | 1245 |
| Cricetidae | *Oligoryzomys* | *rupestris* | DD | 6039.39 | 145 |
| Cricetidae | *Oligoryzomys* | *stramineus* | LC | 530,353.51 | 1245 |
| Cricetidae | *Oligoryzomys* | *vegetus* | LC | 9901.69 | 2 |
| Cricetidae | *Oreoryzomys* | *balneator* | DD | 11,449.71 | 2 |
| Cricetidae | *Oryzomys* | *couesi* | LC | 1,480,757.31 | 6 |
| Cricetidae | *Oryzomys* | *dimidiatus* | LC | 1125.61 | 268 |
| Cricetidae | *Oryzomys* | *gorgasi* | EN | 437.54 | 246 |
| Cricetidae | *Oryzomys* | *palustris* | LC | 1,508,859.97 | 468 |
| Cricetidae | *Osgoodomys* | *banderanus* | LC | 179,790.08 | 2 |
| Cricetidae | *Otonyctomys* | *hatti* | LC | 127,975.30 | 2 |
| Cricetidae | *Ototylomys* | *phyllotis* | LC | 491,818.25 | 2 |
| Cricetidae | *Oxymycterus* | *akodontius* | DD | 65.64 | 2 |
| Cricetidae | *Oxymycterus* | *amazonicus* | LC | 775,698.23 | 2 |
| Cricetidae | *Oxymycterus* | *angularis* | LC | 457,111.79 | 145 |
| Cricetidae | *Oxymycterus* | *caparoae* | LC | 63,207.15 | 2 |
| Cricetidae | *Oxymycterus* | *dasytrichus* | LC | 284,443.66 | 126 |
| Cricetidae | *Oxymycterus* | *delator* | LC | 82,737.39 | 46 |
| Cricetidae | *Oxymycterus* | *hiska* | LC | 34,301.25 | 28 |
| Cricetidae | *Oxymycterus* | *hispidus* | LC | 437,560.28 | 2 |
| Cricetidae | *Oxymycterus* | *hucucha* | EN | 4794.70 | 28 |
| Cricetidae | *Oxymycterus* | *inca* | LC | 360,856.16 | 12458 |
| Cricetidae | *Oxymycterus* | *josei* | EN | 4184.01 | 146 |
| Cricetidae | *Oxymycterus* | *nasutus* | LC | 559,003.35 | 46 |
| Cricetidae | *Oxymycterus* | *paramensis* | LC | 197,322.21 | 28 |
| Cricetidae | *Oxymycterus* | *quaestor* | LC | 784,246.67 | 12 |
| Cricetidae | *Oxymycterus* | *roberti* | LC | 842,645.36 | 248 |
| Cricetidae | *Oxymycterus* | *rufus* | LC | 280,628.65 | 4 |
| Cricetidae | *Paralomys* | *gerbillus* | LC | 25,228.60 | 17 |
| Cricetidae | *Pearsonomys* | *annectens* | VU | 7868.05 | 2 |
| Cricetidae | *Peromyscus* | *aztecus* | LC | 218,567.38 | 28 |
| Cricetidae | *Peromyscus* | *beatae* | LC | 145,829.19 | 2 |
| Cricetidae | *Peromyscus* | *bullatus* | CR | 91.19 | 124 |
| Cricetidae | *Peromyscus* | *difficilis* | LC | 546,549.19 | 247 |
| Cricetidae | *Peromyscus* | *furvus* | DD | 22,387.11 | 2 |
| Cricetidae | *Peromyscus* | *grandis* | NT | 4204.78 | 2 |
| Cricetidae | *Peromyscus* | *gratus* | LC | 598,299.74 | 12348 |
| Cricetidae | *Peromyscus* | *guatemalensis* | LC | 17,874.98 | 2 |
| Cricetidae | *Peromyscus* | *gymnotis* | LC | 40,118,46 | 28 |
| Cricetidae | *Peromyscus* | *hylocetes* | LC | 37,379.49 | 2 |
| Cricetidae | *Peromyscus* | *levipes* | LC | 160,991.05 | 123 |
| Cricetidae | *Peromyscus* | *mayensis* | CR | 127.42 | 2 |
| Cricetidae | *Peromyscus* | *megalops* | LC | 44,159.45 | 2 |
| Cricetidae | *Peromyscus* | *mekisturus* | CR | 98.57 | 2 |
| Cricetidae | *Peromyscus* | *melanocarpus* | EN | 3456.05 | 2 |
| Cricetidae | *Peromyscus* | *melanophrys* | LC | 512,460.45 | 37 |
| Cricetidae | *Peromyscus* | *melanotis* | LC | 494,793.34 | 234 |
| Cricetidae | *Peromyscus* | *melanurus* | EN | 3857.54 | 2 |
| Cricetidae | *Peromyscus* | *merriami* | LC | 197,612.45 | 1 |
| Cricetidae | *Peromyscus* | *mexicanus* | LC | 367,381.83 | 1238 |
| Cricetidae | *Peromyscus* | *pectoralis* | LC | 832,005.28 | 12347 |
| Cricetidae | *Peromyscus* | *perfulvus* | LC | 66,532.30 | 28 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Cricetidae | *Peromyscus* | *sagax* | DD | 202.87 | 2 |
| Cricetidae | *Peromyscus* | *schmidlyi* | LC | 19,072.79 | 2 |
| Cricetidae | *Peromyscus* | *simulus* | VU | 16,221.02 | 2 |
| Cricetidae | *Peromyscus* | *spicilegus* | LC | 125,507.30 | 2 |
| Cricetidae | *Peromyscus* | *stirtoni* | LC | 26,279.27 | 23 |
| Cricetidae | *Peromyscus* | *winkelmanni* | EN | 926.41 | 2 |
| Cricetidae | *Peromyscus* | *yucatanicus* | LC | 137,967.26 | 2 |
| Cricetidae | *Peromyscus* | *zarhynchus* | VU | 6012.13 | 2 |
| Cricetidae | *Phaenomys* | *ferrugineus* | VU | 12,286.82 | 2 |
| Cricetidae | *Phyllotis* | *amicus* | LC | 71,788.91 | 37 |
| Cricetidae | *Phyllotis* | *andium* | LC | 124,062.65 | 1268 |
| Cricetidae | *Phyllotis* | *anitae* | DD | 330.83 | 2 |
| Cricetidae | *Phyllotis* | *bonariensis* | NT | 1804.18 | 134 |
| Cricetidae | *Phyllotis* | *caprinus* | LC | 42,365.07 | 1248 |
| Cricetidae | *Phyllotis* | *darwini* | LC | 130,473.20 | 1 |
| Cricetidae | *Phyllotis* | *definitus* | EN | 4834.42 | 13 |
| Cricetidae | *Phyllotis* | *haggardi* | LC | 34,812.36 | 134 |
| Cricetidae | *Phyllotis* | *limatus* | LC | 137,890.85 | 12347 |
| Cricetidae | *Phyllotis* | *magister* | LC | 58,911.41 | 1238 |
| Cricetidae | *Phyllotis* | *osgoodi* | DD | 5305.74 | 134 |
| Cricetidae | *Phyllotis* | *osilae* | LC | 343,651.10 | 348 |
| Cricetidae | *Phyllotis* | *wolffsohni* | LC | 83,241.75 | 18 |
| Cricetidae | *Phyllotis* | *xanthopygus* | LC | 1,499,328.99 | 12348 |
| Cricetidae | *Podoxymys* | *roraimae* | VU | 239.46 | 2 |
| Cricetidae | *Pseudoryzomys* | *simplex* | LC | 3,116,857.75 | 145 |
| Cricetidae | *Punomys* | *kofordi* | VU | 1054.46 | 148 |
| Cricetidae | *Punomys* | *lemminus* | VU | 2971.23 | 134 |
| Cricetidae | *Reithrodon* | *typicus* | LC | 309,312.42 | 4 |
| Cricetidae | *Reithrodon* | *auritus* | LC | 1,191,488.75 | 14 |
| Cricetidae | *Reithrodontomys* | *bakeri* | EN | 862.81 | 2 |
| Cricetidae | *Reithrodontomys* | *brevirostris* | LC | 20,839.28 | 2 |
| Cricetidae | *Reithrodontomys* | *burti* | DD | 51,549.05 | 1 |
| Cricetidae | *Reithrodontomys* | *chrysopsis* | LC | 53,814.63 | 2 |
| Cricetidae | *Reithrodontomys* | *creper* | LC | 12,286.62 | 2 |
| Cricetidae | *Reithrodontomys* | *darienensis* | LC | 43,586.27 | 2 |
| Cricetidae | *Reithrodontomys* | *fulvescens* | LC | 2,632,374.21 | 14 |
| Cricetidae | *Reithrodontomys* | *gracilis* | LC | 325,029.91 | 12 |
| Cricetidae | *Reithrodontomys* | *hirsutus* | VU | 8317.14 | 7 |
| Cricetidae | *Reithrodontomys* | *mexicanus* | LC | 540,061.79 | 128 |
| Cricetidae | *Reithrodontomys* | *microdon* | VU | 77,650.73 | 2 |
| Cricetidae | *Reithrodontomys* | *paradoxus* | DD | 236.34 | 2 |
| Cricetidae | *Reithrodontomys* | *rodriguezi* | LC | 1719.88 | 2 |
| Cricetidae | *Reithrodontomys* | *sumichrasti* | LC | 328,552.02 | 2 |
| Cricetidae | *Reithrodontomys* | *tenuirostris* | VU | 13,659.84 | 2 |
| Cricetidae | *Reithrodontomys* | *zacatecae* | LC | 211,207.62 | 2 |
| Cricetidae | *Rhagomys* | *longilingua* | LC | 2294.23 | 28 |
| Cricetidae | *Rhagomys* | *rufescens* | NT | 119,283.10 | 28 |
| Cricetidae | *Rheomys* | *mexicanus* | EN | 90.20 | 26 |
| Cricetidae | *Rheomys* | *raptor* | LC | 12,189.32 | 26 |
| Cricetidae | *Rheomys* | *thomasi* | NT | 24,193.33 | 26 |
| Cricetidae | *Rheomys* | *underwoodi* | LC | 5344.96 | 26 |
| Cricetidae | *Rhipidomys* | *caucensis* | DD | 39,005.26 | 2 |
| Cricetidae | *Rhipidomys* | *couesi* | LC | 144,563.41 | 2 |
| Cricetidae | *Rhipidomys* | *fulviventer* | LC | 52,004.00 | 2 |
| Cricetidae | *Rhipidomys* | *austrinus* | LC | 138,615.94 | 28 |
| Cricetidae | *Rhipidomys* | *cariri* | DD | 6378.58 | 468 |
| Cricetidae | *Rhipidomys* | *emiliae* | LC | 697,563.60 | 258 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Cricetidae | *Rhipidomys* | *gardneri* | LC | 152,160,47 | 28 |
| Cricetidae | *Rhipidomys* | *latimanus* | LC | 157,711.57 | 2 |
| Cricetidae | *Rhipidomys* | *leucodactylus* | LC | 4,401,900.16 | 2 |
| Cricetidae | *Rhipidomys* | *macconnelli* | LC | 189,756.33 | 28 |
| Cricetidae | *Rhipidomys* | *macrurus* | LC | 1,567,006.26 | 258 |
| Cricetidae | *Rhipidomys* | *mastacalis* | LC | 634,232.56 | 2 |
| Cricetidae | *Rhipidomys* | *modicus* | NT | 74,243.97 | 2 |
| Cricetidae | *Rhipidomys* | *nitela* | LC | 1,447,248.25 | 28 |
| Cricetidae | *Rhipidomys* | *ochrogaster* | DD | 7579.21 | 2 |
| Cricetidae | *Rhipidomys* | *venezuelae* | LC | 172,683.22 | 2 |
| Cricetidae | *Rhipidomys* | *venustus* | LC | 8414.52 | 2 |
| Cricetidae | *Rhipidomys* | *wetzeli* | LC | 138,912.85 | 23 |
| Cricetidae | *Salinomys* | *delicatus* | DD | 41,063.49 | 1 |
| Cricetidae | *Scapteromys* | *aquaticus* | LC | 260,133.45 | 16 |
| Cricetidae | *Scapteromys* | *tumidus* | LC | 258,563.22 | 146 |
| Cricetidae | *Scolomys* | *melanops* | LC | 100,719.04 | 28 |
| Cricetidae | *Scolomys* | *ucayalensis* | LC | 197,624.02 | 2 |
| Cricetidae | *Scotinomys* | *teguina* | LC | 129,226.55 | 2 |
| Cricetidae | *Scotinomys* | *xerampelinus* | LC | 5119.23 | 24 |
| Cricetidae | *Sigmodon* | *alleni* | VU | 151,425.01 | 2 |
| Cricetidae | *Sigmodon* | *alstoni* | LC | 840,151.95 | 14 |
| Cricetidae | *Sigmodon* | *fulviventer* | LC | 464,212.44 | 124 |
| Cricetidae | *Sigmodon* | *hirsutus* | LC | 761,227.05 | 2 |
| Cricetidae | *Sigmodon* | *inopinatus* | VU | 7172.00 | 146 |
| Cricetidae | *Sigmodon* | *leucotis* | LC | 282,568.69 | 2 |
| Cricetidae | *Sigmodon* | *mascotensis* | LC | 252,526.33 | 28 |
| Cricetidae | *Sigmodon* | *peruanus* | LC | 98,148.73 | 268 |
| Cricetidae | *Sigmodon* | *planifrons* | EN | 4313.39 | 2 |
| Cricetidae | *Sigmodon* | *toltecus* | LC | 416,841.04 | 4 |
| Cricetidae | *Sigmodontomys* | *alfari* | LC | 383,742.62 | 268 |
| Cricetidae | *Sigmodontomys* | *aphrastus* | DD | 864.37 | 2 |
| Cricetidae | *Sooretamys* | *angouya* | LC | 1,388,660.06 | 258 |
| Cricetidae | *Tapecomys* | *primus* | LC | 2330.95 | 2 |
| Cricetidae | *Thalpomys* | *cerradensis* | LC | 488,727.99 | 145 |
| Cricetidae | *Thalpomys* | *lasiotis* | LC | 555,155.81 | 145 |
| Cricetidae | *Thaptomys* | *nigrita* | LC | 1,057,784.53 | 124 |
| Cricetidae | *Thomasomys* | *apeco* | VU | 1276.75 | 2 |
| Cricetidae | *Thomasomys* | *aureus* | LC | 399,481.91 | 2 |
| Cricetidae | *Thomasomys* | *baeops* | LC | 86,495.27 | 1248 |
| Cricetidae | *Thomasomys* | *bombycinus* | DD | 6202.75 | 124 |
| Cricetidae | *Thomasomys* | *caudivarius* | LC | 34,453.01 | 2 |
| Cricetidae | *Thomasomys* | *cinereiventer* | LC | 49,299.06 | 2 |
| Cricetidae | *Thomasomys* | *cinereus* | LC | 26,408.22 | 28 |
| Cricetidae | *Thomasomys* | *cinnameus* | LC | 27,426.30 | 23 |
| Cricetidae | *Thomasomys* | *daphne* | LC | 109,390.83 | 28 |
| Cricetidae | *Thomasomys* | *eleusis* | LC | 12,717.61 | 124 |
| Cricetidae | *Thomasomys* | *erro* | LC | 13,995.06 | 28 |
| Cricetidae | *Thomasomys* | *gracilis* | NT | 35,600.33 | 46 |
| Cricetidae | *Thomasomys* | *hudsoni* | DD | 712.73 | 14 |
| Cricetidae | *Thomasomys* | *hylophilus* | EN | 3412.19 | 2 |
| Cricetidae | *Thomasomys* | *incanus* | VU | 19,614.06 | 2 |
| Cricetidae | *Thomasomys* | *ischyrus* | VU | 43,957.11 | 2 |
| Cricetidae | *Thomasomys* | *kalinowskii* | VU | 41,985.58 | 28 |
| Cricetidae | *Thomasomys* | *ladewi* | LC | 12,757.27 | 124 |
| Cricetidae | *Thomasomys* | *laniger* | LC | 55,123.34 | 1248 |
| Cricetidae | *Thomasomys* | *macrotis* | VU | 1375.92 | 124 |
| Cricetidae | *Thomasomys* | *monochromos* | EN | 3599.95 | 24 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Cricetidae | *Thomasomys* | *niveipes* | LC | 12,255.89 | 124 |
| Cricetidae | *Thomasomys* | *notatus* | LC | 57,801.63 | 2 |
| Cricetidae | *Thomasomys* | *onkiro* | VU | 1122.17 | 12 |
| Cricetidae | *Thomasomys* | *oreas* | LC | 48,387.38 | 2 |
| Cricetidae | *Thomasomys* | *paramorum* | LC | 29,904.28 | 124 |
| Cricetidae | *Thomasomys* | *popayanus* | DD | 8568.79 | 1248 |
| Cricetidae | *Thomasomys* | *praetor* | DD | 31,628.81 | 124 |
| Cricetidae | *Thomasomys* | *pyrrhonotus* | VU | 22,414.59 | 124 |
| Cricetidae | *Thomasomys* | *rhoadsi* | LC | 4957.13 | 124 |
| Cricetidae | *Thomasomys* | *rosalinda* | DD | 3102.69 | 2 |
| Cricetidae | *Thomasomys* | *silvestris* | LC | 18,571.39 | 124 |
| Cricetidae | *Thomasomys* | *taczanowskii* | LC | 19,863.07 | 1248 |
| Cricetidae | *Thomasomys* | *ucucha* | VU | 215.66 | 24 |
| Cricetidae | *Thomasomys* | *vestitus* | LC | 6459.17 | 2 |
| Cricetidae | *Thomasomys* | *vulcani* | DD | 416.03 | 124 |
| Cricetidae | *Transandinomys* | *bolivaris* | LC | 271,373.18 | 26 |
| Cricetidae | *Transandinomys* | *talamancae* | LC | 510,973.62 | 8 |
| Cricetidae | *Tylomys* | *bullaris* | CR | 95.39 | 2 |
| Cricetidae | *Tylomys* | *mirae* | LC | 125,757.69 | 2 |
| Cricetidae | *Tylomys* | *nudicaudus* | LC | 489,166.13 | 2 |
| Cricetidae | *Tylomys* | *tumbalensis* | CR | 93.39 | 2 |
| Cricetidae | *Tylomys* | *watsoni* | LC | 90,447.33 | 2 |
| Cricetidae | *Wiedomys* | *cerradensis* | DD | 3884.46 | 12 |
| Cricetidae | *Wiedomys* | *pyrrhorhinos* | LC | 694,718.01 | 145 |
| Cricetidae | *Wilfredomys* | *oenax* | EN | 116,396.51 | 2 |
| Cricetidae | *Xenomys* | *nelsoni* | EN | 4750.51 | 2 |
| Cricetidae | *Zygodontomys* | *brevicauda* | LC | 1,694,766.44 | 2568 |
| Cricetidae | *Zygodontomys* | *brunneus* | LC | 75,737.72 | 468 |
| Ctenomyidae | *Ctenomys* | *azarae* | VU | 7814.12 | 1 |
| Ctenomyidae | *Ctenomys* | *argentinus* | NT | 27,067.23 | 14 |
| Ctenomyidae | *Ctenomys* | *bergi* | VU | 5375.83 | 45 |
| Ctenomyidae | *Ctenomys* | *boliviensis* | LC | 133,220.12 | 58 |
| Ctenomyidae | *Ctenomys* | *bonettoi* | EN | 2285.09 | 1 |
| Ctenomyidae | *Ctenomys* | *colburni* | DD | 718.21 | 4 |
| Ctenomyidae | *Ctenomys* | *conoveri* | LC | 98,397.45 | 14 |
| Ctenomyidae | *Ctenomys* | *dorbignyi* | NT | 8814.85 | 14 |
| Ctenomyidae | *Ctenomys* | *dorsalis* | DD | 11,127.01 | 5 |
| Ctenomyidae | *Ctenomys* | *emilianus* | NT | 9660.19 | 7 |
| Ctenomyidae | *Ctenomys* | *fodax* | DD | 1828.17 | 4 |
| Ctenomyidae | *Ctenomys* | *frater* | LC | 18,249.59 | 48 |
| Ctenomyidae | *Ctenomys* | *fulvus* | LC | 74,406.15 | 1245 |
| Ctenomyidae | *Ctenomys* | *haigi* | LC | 26,893.83 | 256 |
| Ctenomyidae | *Ctenomys* | *knighti* | DD | 8242.78 | 4 |
| Ctenomyidae | *Ctenomys* | *latro* | VU | 6530.90 | 14 |
| Ctenomyidae | *Ctenomys* | *leucodon* | LC | 11,433.57 | 148 |
| Ctenomyidae | *Ctenomys* | *lewisi* | LC | 4752.36 | 48 |
| Ctenomyidae | *Ctenomys* | *magellanicus* | VU | 78,726.46 | 4 |
| Ctenomyidae | *Ctenomys* | *maulinus* | LC | 51,469.22 | 4 |
| Ctenomyidae | *Ctenomys* | *mendocinus* | LC | 137,027.56 | 146 |
| Ctenomyidae | *Ctenomys* | *minutus* | DD | 73,653.04 | 148 |
| Ctenomyidae | *Ctenomys* | *opimus* | LC | 288,109.71 | 4 |
| Ctenomyidae | *Ctenomys* | *osvaldoreigi* | CR | 50.59 | 4 |
| Ctenomyidae | *Ctenomys* | *pearsoni* | NT | 11,534.90 | 14 |
| Ctenomyidae | *Ctenomys* | *peruanus* | LC | 5463.78 | 48 |
| Ctenomyidae | *Ctenomys* | *pilarensis* | EN | 1279.68 | 48 |
| Ctenomyidae | *Ctenomys* | *porteousi* | NT | 33,104.57 | 48 |
| Ctenomyidae | *Ctenomys* | *pundti* | VU | 10,500.55 | 4 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Ctenomyidae | *Ctenomys* | *rionegrensis* | EN | 1156.89 | 7 |
| Ctenomyidae | *Ctenomys* | *sociabilis* | CR | 1062.08 | 56 |
| Ctenomyidae | *Ctenomys* | *steinbachi* | LC | 19,201.35 | 58 |
| Ctenomyidae | *Ctenomys* | *talarum* | LC | 51,329.04 | 4 |
| Ctenomyidae | *Ctenomys* | *tuconax* | DD | 738.62 | 145 |
| Ctenomyidae | *Ctenomys* | *tucumanus* | DD | 7703.31 | 45 |
| Cuniculidae | *Cuniculus* | *paca* | LC | 12,541,595.43 | 2 |
| Cuniculidae | *Cuniculus* | *taczanowskii* | NT | 400,048.39 | 26 |
| Dasyproctidae | *Dasyprocta* | *guamara* | NT | 22,949.72 | 2 |
| Dasyproctidae | *Dasyprocta* | *mexicana* | CR | 107,850.51 | 2 |
| Dasyproctidae | *Myoprocta* | *acouchy* | LC | 993,240.83 | 2 |
| Dasyproctidae | *Myoprocta* | *pratti* | LC | 2,337,013.67 | 2 |
| Dasyproctidae | *Dasyprocta* | *leporina* | LC | 2,022,290.93 | 28 |
| Dasyproctidae | *Dasyprocta* | *prymnolopha* | LC | 1,929,725.46 | 5 |
| Dasyproctidae | *Dasyprocta* | *punctata* | LC | 2,160,011.93 | 28 |
| Dinomyidae | *Dinomys* | *branickii* | VU | 1,835,557.68 | 24 |
| Echimyidae | *Callistomys* | *pictus* | EN | 4897.12 | 28 |
| Echimyidae | *Carterodon* | *sulcidens* | DD | 272,973.84 | 25 |
| Echimyidae | *Clyomys* | *bishopi* | DD | 179,568.47 | 25 |
| Echimyidae | *Clyomys* | *laticeps* | LC | 1,554,514.38 | 5 |
| Echimyidae | *Dactylomys* | *boliviensis* | LC | 337,052.67 | 28 |
| Echimyidae | *Dactylomys* | *dactylinus* | LC | 3,305,337.14 | 2 |
| Echimyidae | *Dactylomys* | *peruanus* | DD | 163.77 | 2 |
| Echimyidae | *Diplomys* | *caniceps* | DD | 432.22 | 2 |
| Echimyidae | *Diplomys* | *labilis* | LC | 110,967.09 | 28 |
| Echimyidae | *Echimys* | *chrysurus* | LC | 1,583,314.65 | 2 |
| Echimyidae | *Echimys* | *saturnus* | DD | 131,044,76 | 2 |
| Echimyidae | *Echimys* | *vieirai* | DD | 68,147.46 | 2 |
| Echimyidae | *Euryzygomatomys* | *spinosus* | LC | 807,898.80 | 24 |
| Echimyidae | *Hoplomys* | *gymnurus* | LC | 332,787.01 | 2 |
| Echimyidae | *Isothrix* | *bistriata* | LC | 1,479,992.84 | 24 |
| Echimyidae | *Isothrix* | *negrensis* | LC | 294,626.38 | 2 |
| Echimyidae | *Isothrix* | *pagurus* | LC | 351,391.32 | 2 |
| Echimyidae | *Isothrix* | *sinnamariensis* | LC | 4835.34 | 2 |
| Echimyidae | *Kannabateomys* | *amblyonyx* | LC | 916,211.02 | 2 |
| Echimyidae | *Lonchothrix* | *emiliae* | LC | 378,159.61 | 24 |
| Echimyidae | *Makalata* | *didelphoides* | LC | 3,605,726.76 | 28 |
| Echimyidae | *Makalata* | *macrura* | LC | 2,457,730.06 | 28 |
| Echimyidae | *Makalata* | *rhipidura* | DD | 27,012.30 | 2 |
| Echimyidae | *Mesomys* | *hispidus* | LC | 4,948,316.20 | 28 |
| Echimyidae | *Mesomys* | *leniceps* | DD | 801.27 | 2 |
| Echimyidae | *Mesomys* | *occultus* | LC | 53,277.04 | 2 |
| Echimyidae | *Mesomys* | *stimulax* | LC | 437,337.92 | 2 |
| Echimyidae | *Olallamys* | *albicauda* | DD | 5976.61 | 2 |
| Echimyidae | *Olallamys* | *edax* | DD | 5390.24 | 12 |
| Echimyidae | *Pattonomys* | *occasius* | DD | 192,027.44 | 2 |
| Echimyidae | *Pattonomys* | *semivillosus* | LC | 349,714.41 | 25 |
| Echimyidae | *Phyllomys* | *blainvillii* | LC | 332,323.41 | 2 |
| Echimyidae | *Phyllomys* | *dasythrix* | LC | 276,288.43 | 2 |
| Echimyidae | *Phyllomys* | *kerri* | DD | 2115.86 | 2 |
| Echimyidae | *Phyllomys* | *lamarum* | DD | 93,318.68 | 2 |
| Echimyidae | *Phyllomys* | *lundi* | EN | 5314.51 | 2 |
| Echimyidae | *Phyllomys* | *mantiqueirensis* | CR | 102.27 | 2 |
| Echimyidae | *Phyllomys* | *medius* | LC | 501,984.67 | 2 |
| Echimyidae | *Phyllomys* | *nigrispinus* | LC | 174,488.41 | 2 |
| Echimyidae | *Phyllomys* | *pattoni* | LC | 302,943.24 | 2 |
| Echimyidae | *Phyllomys* | *unicolor* | CR | 150.32 | 2 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Echimyidae | *Proechimys* | *brevicauda* | LC | 1,460,737.49 | 28 |
| Echimyidae | *Proechimys* | *canicollis* | LC | 32,608.66 | 2 |
| Echimyidae | *Proechimys* | *chrysaeolus* | DD | 36,745.86 | 2 |
| Echimyidae | *Proechimys* | *cuvieri* | LC | 3,499,934.71 | 28 |
| Echimyidae | *Proechimys* | *decumanus* | VU | 30,725.47 | 2 |
| Echimyidae | *Proechimys* | *echinothrix* | LC | 277,420.79 | 2 |
| Echimyidae | *Proechimys* | *gardneri* | DD | 354,806.07 | 2 |
| Echimyidae | *Proechimys* | *goeldii* | VU | 1,029,588.63 | 28 |
| Echimyidae | *Proechimys* | *guyannensis* | LC | 1,497,167.48 | 28 |
| Echimyidae | *Proechimys* | *kulinae* | DD | 86,612.28 | 2 |
| Echimyidae | *Proechimys* | *longicaudatus* | LC | 1,349,009.24 | 2 |
| Echimyidae | *Proechimys* | *magdalenae* | DD | 51,660.30 | 2 |
| Echimyidae | *Proechimys* | *mincae* | DD | 390.61 | 2 |
| Echimyidae | *Proechimys* | *oconnelli* | DD | 22,757.26 | 2 |
| Echimyidae | *Proechimys* | *pattoni* | LC | 157,591.80 | 2 |
| Echimyidae | *Proechimys* | *poliopus* | VU | 13,317.83 | 2 |
| Echimyidae | *Proechimys* | *quadruplicatus* | LC | 1,498,624.54 | 2 |
| Echimyidae | *Proechimys* | *roberti* | VU | 1,702,715.39 | 25 |
| Echimyidae | *Proechimys* | *semispinosus* | LC | 348,113.73 | 2 |
| Echimyidae | *Proechimys* | *simonsi* | LC | 1,934,956.10 | 28 |
| Echimyidae | *Proechimys* | *steerei* | LC | 1,677,761.14 | 2 |
| Echimyidae | *Proechimys* | *urichi* | LC | 15,837.16 | 2 |
| Echimyidae | *Thrichomys* | *apereoides* | LC | 1,168,178.79 | 15 |
| Echimyidae | *Thrichomys* | *inermis* | LC | 115,404.01 | 235 |
| Echimyidae | *Thrichomys* | *pachyurus* | LC | 166,432.45 | 25 |
| Echimyidae | *Toromys* | *grandis* | LC | 176,728.97 | 2 |
| Echimyidae | *Trinomys* | *albispinus* | LC | 70,214.54 | 12345 |
| Echimyidae | *Trinomys* | *dimidiatus* | LC | 64,000.54 | 1 |
| Echimyidae | *Trinomys* | *eliasi* | EN | 4167.65 | 12 |
| Echimyidae | *Trinomys* | *gratiosus* | LC | 67,225.51 | 2 |
| Echimyidae | *Trinomys* | *iheringi* | LC | 702,365.04 | 2 |
| Echimyidae | *Trinomys* | *mirapitanga* | DD | 571.00 | 2 |
| Echimyidae | *Trinomys* | *moojeni* | EN | 1652.53 | 25 |
| Echimyidae | *Trinomys* | *myosuros* | LC | 569,342.22 | 2 |
| Echimyidae | *Trinomys* | *paratus* | DD | 28,264.44 | 2 |
| Echimyidae | *Trinomys* | *setosus* | LC | 86,401.64 | 25 |
| Echimyidae | *Trinomys* | *yonenagae* | EN | 4982.10 | 5 |
| Echimyidae | *Chaetomys* | *subspinosus* | VU | 109,582.90 | 28 |
| Erethizontidae | *Coendou* | *bicolor* | LC | 1,229,469.44 | 28 |
| Erethizontidae | *Coendou* | *nycthemera* | DD | 406,493.64 | 2 |
| Erethizontidae | *Coendou* | *prehensilis* | LC | 10,157,531.85 | 2 |
| Erethizontidae | *Coendou* | *quichua* | DD | 68,121.81 | 2 |
| Erethizontidae | *Coendou* | *rothschildi* | LC | 67,665.22 | 2 |
| Erethizontidae | *Coendou* | *sanctamartae* | DD | 12,287.08 | 2 |
| Erethizontidae | *Echinoprocta* | *rufescens* | LC | 200,136.91 | 2 |
| Erethizontidae | *Sphiggurus* | *ichillus* | DD | 22,857.54 | 2 |
| Erethizontidae | *Sphiggurus* | *insidiosus* | LC | 1,077,040.75 | 28 |
| Erethizontidae | *Sphiggurus* | *melanurus* | LC | 1,443,333.43 | 2 |
| Erethizontidae | *Sphiggurus* | *mexicanus* | LC | 707,140.83 | 2 |
| Erethizontidae | *Sphiggurus* | *pruinosus* | LC | 141,092.02 | 2 |
| Erethizontidae | *Sphiggurus* | *spinosus* | LC | 1,332,534.83 | 25 |
| Erethizontidae | *Sphiggurus* | *vestitus* | DD | 1456.96 | 28 |
| Erethizontidae | *Sphiggurus* | *villosus* | LC | 834,766.89 | 2 |
| Geomyidae | *Cratogeomys* | *fulvescens* | LC | 2140.59 | 248 |
| Geomyidae | *Cratogeomys* | *fumosus* | LC | 41,174.01 | 248 |
| Geomyidae | *Cratogeomys* | *merriami* | LC | 6421.38 | 248 |
| Geomyidae | *Cratogeomys* | *perotensis* | LC | 4184.99 | 248 |
| Geomyidae | *Geomys* | *tropicalis* | CR | 20.50 | 14 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Geomyidae | *Orthogeomys* | *cavator* | LC | 5661.99 | 28 |
| Geomyidae | *Orthogeomys* | *cherriei* | LC | 7520.64 | 28 |
| Geomyidae | *Orthogeomys* | *cuniculus* | DD | 270.87 | 28 |
| Geomyidae | *Orthogeomys* | *dariensis* | LC | 3839.82 | 28 |
| Geomyidae | *Orthogeomys* | *grandis* | LC | 140,753.32 | 28 |
| Geomyidae | *Orthogeomys* | *heterodus* | LC | 1191.90 | 48 |
| Geomyidae | *Orthogeomys* | *hispidus* | LC | 397,268.13 | 28 |
| Geomyidae | *Orthogeomys* | *lanius* | CR | 87.69 | 2 |
| Geomyidae | *Orthogeomys* | *matagalpae* | LC | 3004.24 | 2 |
| Geomyidae | *Orthogeomys* | *thaeleri* | LC | 9588.99 | 24 |
| Geomyidae | *Orthogeomys* | *underwoodi* | LC | 6276.02 | 28 |
| Geomyidae | *Pappogeomys* | *alcorni* | CR | 344.32 | 248 |
| Geomyidae | *Pappogeomys* | *bulleri* | LC | 35,563.93 | 124 |
| Geomyidae | *Thomomys* | *bottae* | LC | 1,541,257.36 | 2478 |
| Geomyidae | *Thomomys* | *umbrinus* | LC | 469,401.24 | 1247 |
| Geomyidae | *Zygogeomys* | *trichopus* | EN | 612.88 | 2 |
| Heteromyidae | *Chaetodipus* | *arenarius* | LC | 77,616.87 | 7 |
| Heteromyidae | *Chaetodipus* | *artus* | LC | 89,251.67 | 7 |
| Heteromyidae | *Chaetodipus* | *dalquesti* | VU | 11,565.75 | 7 |
| Heteromyidae | *Chaetodipus* | *goldmani* | VU | 58,863.38 | 1 |
| Heteromyidae | *Chaetodipus* | *hispidus* | LC | 2,300,212.39 | 14 |
| Heteromyidae | *Chaetodipus* | *pernix* | LC | 99,046.89 | 1 |
| Heteromyidae | *Dipodomys* | *phillipsii* | LC | 176,865.57 | 17 |
| Heteromyidae | *Heteromys* | *anomalus* | LC | 296,930.41 | 28 |
| Heteromyidae | *Heteromys* | *australis* | LC | 226,892.05 | 2 |
| Heteromyidae | *Heteromys* | *desmarestianus* | LC | 476,858.82 | 2 |
| Heteromyidae | *Heteromys* | *gaumeri* | LC | 167,160.93 | 2 |
| Heteromyidae | *Heteromys* | *nelsoni* | EN | 479.22 | 2 |
| Heteromyidae | *Heteromys* | *oasicus* | EN | 56.26 | 2 |
| Heteromyidae | *Heteromys* | *oresterus* | LC | 1327.45 | 2 |
| Heteromyidae | *Heteromys* | *teleus* | VU | 19,152.42 | 2 |
| Heteromyidae | *Liomys* | *adspersus* | LC | 28,432.62 | 12 |
| Heteromyidae | *Liomys* | *irroratus* | LC | 606,821.11 | 1 |
| Heteromyidae | *Liomys* | *pictus* | LC | 439,272.19 | 12 |
| Heteromyidae | *Liomys* | *salvini* | LC | 169,487.37 | 2 |
| Heteromyidae | *Liomys* | *spectabilis* | EN | 3178.64 | 2 |
| Myocastoridae | *Myocastor* | *coypus* | LC | 3,902,337.33 | 6 |
| Octodontidae | *Aconaemys* | *fuscus* | LC | 50,643.19 | 23 |
| Octodontidae | *Aconaemys* | *porteri* | DD | 30,176.40 | 23 |
| Octodontidae | *Aconaemys* | *sagei* | DD | 10,248.78 | 23 |
| Octodontidae | *Octodon* | *bridgesi* | VU | 98,037.08 | 12 |
| Octodontidae | *Octodon* | *degus* | LC | 64,667.64 | 1 |
| Octodontidae | *Octodon* | *lunatus* | VU | 32,234.68 | 13 |
| Octodontidae | *Octodon* | *pacificus* | CR | 532.03 | 2 |
| Octodontidae | *Octodontomys* | *gliroides* | LC | 375,210.78 | 134 |
| Octodontidae | *Pipanacoctomys* | *aureus* | CR | 602.79 | 6 |
| Octodontidae | *Salinoctomys* | *loschalchalerosorum* | CR | 472.87 | 6 |
| Octodontidae | *Spalacopus* | *cyanus* | LC | 76,133.89 | 245 |
| Octodontidae | *Tympanoctomys* | *barrerae* | NT | 7481.52 | 5 |
| Sciuridae | *Glaucomys* | *volans* | LC | 3,848,269.76 | 2 |
| Sciuridae | *Microsciurus* | *alfari* | LC | 117,453.37 | 2 |
| Sciuridae | *Microsciurus* | *mimulus* | LC | 160,234.70 | 2 |
| Sciuridae | *Sciurillus* | *pusillus* | DD | 851,537.02 | 2 |
| Sciuridae | *Sciurus* | *aestuans* | LC | 6,940,484.59 | 28 |
| Sciuridae | *Sciurus* | *aureogaster* | LC | 6.84 | 28 |
| Sciuridae | *Sciurus* | *colliaei* | LC | 81,301.76 | 2 |
| Sciuridae | *Sciurus* | *deppei* | LC | 695,004.11 | 2 |
| Sciuridae | *Sciurus* | *flammifer* | DD | 121,714.20 | 2 |

(*Appendix 1 continued*)

| Family | Genus | Species | IUCN category | Total range | Symbol for habitat types |
|---|---|---|---|---|---|
| Sciuridae | *Sciurus* | *granatensis* | LC | 988,543.45 | 28 |
| Sciuridae | *Sciurus* | *ignitus* | DD | 1,498,606.66 | 2 |
| Sciuridae | *Sciurus* | *igniventris* | LC | 2,711,158.41 | 2 |
| Sciuridae | *Sciurus* | *nayaritensis* | LC | 249,139.45 | 2 |
| Sciuridae | *Sciurus* | *oculatus* | LC | 101,822.67 | 2 |
| Sciuridae | *Sciurus* | *richmondi* | NT | 21,022.27 | 2 |
| Sciuridae | *Sciurus* | *sanborni* | DD | 48,842.21 | 2 |
| Sciuridae | *Sciurus* | *spadiceus* | LC | 3,247,840.42 | 2 |
| Sciuridae | *Sciurus* | *stramineus* | LC | 156,432.81 | 28 |
| Sciuridae | *Sciurus* | *variegatoides* | LC | 392,633.32 | 28 |
| Sciuridae | *Sciurus* | *yucatanensis* | LC | 194,219.73 | 28 |
| Sciuridae | *Spermophilus* | *annulatus* | LC | 44,720.04 | 28 |
| Sciuridae | *Spermophilus* | *mexicanus* | LC | 715,708.25 | 148 |
| Sciuridae | *Spermophilus* | *perotensis* | EN | 3073.70 | 278 |
| Sciuridae | *Spermophilus* | *variegatus* | LC | 2,304,689.24 | 138 |
| Sciuridae | *Syntheosciurus* | *brochus* | NT | 7878.67 | 2 |

**Appendix 1** Raw data on South American rodents.
Total range are in $km^2$. Symbols for habitat types (column 6) are as follows: 1=shrubland, 2=forest, 3=grassland, 4=savannah, 5=flooded, 6=bare, 7=cultivated/artificial. When multiple habitats are inhabited by a given species (for instance, shrubland+forest+grassland), the resulting symbol is 123. Each symbol is associated with a specific habitat code (column 6) used in the figures.

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