## **Supplementary material**

## Study area

The Cerrado occupies about 23% of Brazilian territory (Fig. 1[)](https://www.zotero.org/google-docs/?O5aJpO) and is considered the 2nd largest phytogeographic domain in Brazil [(Myers et al., 2000)](https://www.zotero.org/google-docs/?UcbJ4Z). The climate is seasonal, with an average annual rainfall of 1500 mm and a temperature between 22 and 27°C [(Klink and Machado, 2005)](https://www.zotero.org/google-docs/?zrxbMH). The biome is composed of a mosaic of types of vegetation, which range from forested areas (e.g. "cerrado *sensu stricto*", a dense shrubland ecosystem) to open areas (e.g. grassland; [Klink and Machado, 2005](https://www.zotero.org/google-docs/?Y6J3iZ)). The high rate of deforestation and habitat modification, together with its high levels of plant endemism (approximately 4400 endemic species[)](https://www.zotero.org/google-docs/?eI0m4K) make the Cerrado one of 34 biodiversity hotspots worldwide [(Myers et al., 2000)](https://www.zotero.org/google-docs/?61YkTU). In the last decades, the Cerrado has experienced an intensification in occupation by agricultural activities, which has increased deforestation rates [(Silvano and Segalla, 2005)](https://www.zotero.org/google-docs/?krPZKr). Currently, about 34% of the original Cerrado coverage is considered preserved [(Pellens and Grandcolas, 2016)](https://www.zotero.org/google-docs/?qUvNCX).

*Occurrence data filtering*

Our search resulted in 99,062 occurrence records for the species. After gathering the occurrence records, we performed filtering to replace synonyms with the most recent nomenclature, eliminating duplicate, incomplete and improbable coordinates. Finally, we cropped and masked the occurrence records by the calibration area represented by the Cerrado polygon with a 1.5° of buffer. We reduced environmental biases of occurrence records, reflected in geographical sampling biases using the spThin algorithm [(Aiello-Lammens et al., 2015)](https://www.zotero.org/google-docs/?I23bqT) with a minimum distance of 10 km between occurrences (find thinned occurrences in SM table 1).

*Life history traits and biogeographic character*

We follow the classification of Valdujo et al., (2012) to consider species as endemic or widespread. These data come from the IUCN database and from literature about the Brazilian Cerrado anuran species, such as Ribeiro et al., (2017), Vaz-Silva et al., (2020) and Valdujo et al., (2012) (see SM table 2). These life-history traits were chosen because they represent important aspects that determine species resilience [(Ribeiro et al., 2017)](https://www.zotero.org/google-docs/?N2QkT4).

To reduce the number of categories (19), we grouped the most similar ecoregions based on a cluster analysis provided by the author (Personal communication. Sano, 2021), but with a coarser hierarchical level. The species were assigned to each ecoregion according to the highest number of presences. To classify species according to elevation, we also follow the article by [Sano et al., (2019)](https://www.zotero.org/google-docs/?E40jtj), using data referring to elevation. We separated the regions in highland (above 471.5 meters) and lowland (below 471.5 meters) and then, we assigned the species to the regions based on the largest number of presences. Therefore, we search for the higher hierarchical level with a geographical contiguity, and this produce 4 areas, two peripheral areas (one on the north border of the biome and another on the southwest border) and two main areas, one in the southwest to northeast (ecoregion 1) and another in the west to the north (ecoregion 2, Fig. 1). As the two peripheral areas have no typical species these regions are disregarded in analysis.

Ecoregion 1 occupies the eastern portion of the cerrado and is occupied by important conservation areas and, therefore, there is still a considerable portion of natural vegetation. Climatically, the Northeast region presents high temperature and low precipitation (Françoso et al., 2020). The southeast region comprises the Espinhaço mountain range and has been extensively explored, remaining only 35% of the area under protection (Françoso et al., 2020). The climate of this area is highly seasonal compared to other regions of the cerrado. This ecoregion also ecompasses a ecotone area between Amazon and Caatinga biomes (Sano et al., 2019). The ecoregion 2 is located mainly in the western portion of the biome, but it also occupies part of the north and center of the Cerrado. In terms of climate, this region is likely to experience high climate anomalies in the future for both precipitation and temperature (Borges and Loyola, 2020). There is high heterogeneity of habitats in ecoregion 2, as it receives influence from the Amazon in its southwestern portion and influence from the Atlantic Forest in the southern portion. In the northwest region, important protected areas of Jalapão are located and a high percentage of native vegetation can be found (Françoso et al., 2020). Sano et al., (2019) shows that the Cerrado regions most threatened in terms of land use change are located in diversified regions concentrated within Ecoregion 2, especially in the Southeast region.

## Optimization of model parameters

We build Ecological Niche Models (ENM) relating the known occurrences of the species and bioclimatic variables (the seven BIOs mentioned in the topic above). The calibration area was given by the minimum convex polygon (MCP), based on 100% of the species occurrence points, surrounded by a 1.5° buffer. The MCP and the buffer were made using the ENMwizard package [(Heming et al., 2019)](https://www.zotero.org/google-docs/?ri3sLD). We calibrated the models with the climate scenario called ‘present’, based on data from 1970-2000 [(Fick and Hijmans, 2017)](https://www.zotero.org/google-docs/?EKY4Y2).

The candidate models were adjusted using various options of Feature Classes (FC) and Regularization Multipliers (RMs), giving variable complexity to the models. These parameters concern transformations of environmental variables and penalize model complexity, respectively [(Phillips et al., 2017)](https://www.zotero.org/google-docs/?w7xUt3). The models were built using all combinations of four FCs: “L” is linear, “P” product, “Q” quadratic and “H” hinge. The RM values varied from 0.5 to 4.5 with intervals of 0.5.

For validation and evaluation of the predictive capacity of the models, the use of independent occurrence records is ideally indicated [(Araujo et al., 2005)](https://www.zotero.org/google-docs/?4VWvNT). However, for many species, this data is scarce, and even when data are available, localities tend to show spatial autocorrelation [(Pearson et al., 2006)](https://www.zotero.org/google-docs/?HY4bHR). One of the most used procedures to overcome the lack of spatially independent data is cross-validation [(Roberts et al., 2017)](https://www.zotero.org/google-docs/?8oMcUV), in which a part of the points is separated for testing (model evaluation) and another for training (model calibration, [Fielding and Bell, 1997)](https://www.zotero.org/google-docs/?e0FNvR). We used *ENMevaluate\_b* function from ENMwizard package [(Heming et al., 2019)](https://www.zotero.org/google-docs/?eOxQB2) to apply one of the two methods of geographic partition in the occurrence records for each species: ‘block’ and ‘jackknife’. The jackknife method was applied to species with less than 15 records and the block method for species with more than 15 occurrence records. The block method strategically partitions the occurrence points into four spatially independent blocks and runs four iterations using one of the blocks to evaluate the model and the others for calibration [(Roberts et al., 2017)](https://www.zotero.org/google-docs/?FcTzVK). The Jackknife procedure removes only one point at a time from the data set and builds a new model in the absence of the removed point [(Pearson et al., 2006)](https://www.zotero.org/google-docs/?8Jk0iI).

## Model selection

To select the best model, we evaluated each candidate model according to the lowest Akaike Information Criterion (Low AICc), using the calib\_model\_b function of ENMwizard [(Heming et al., 2019)](https://www.zotero.org/google-docs/?8gQcuf). Low AICc was calculated using the *ENMevaluate* function of the ENMeval package [(Muscarella et al., 2014)](https://www.zotero.org/google-docs/?Ov3Zpd). We converted the spatial distribution of the ideal climatic conditions of each species into a binary vector applying the cut-off threshold of 10%.

## Model projection

We selected three global circulation models (GCM) to obtain projections for the future: CNRM-CM6-1, MRI-ESM2-0, and MIROC6. We calculated a weighted average to combine the results of the three GCMs. We projected the climate for the year 2050 (average for 2041-2060), using two Shared Socioeconomic Pathways (SSPs): SSP245, considered an optimistic scenario for the emission of greenhouse gases and SSP585, considered a pessimistic scenario. The projection area was defined as the extension limits of the Cerrado with a buffer of 1.5°.

*Statistical analysis*

We used the logarithm of the difference between the potential area in the future and the present as a response variable and life-history traits and biogeographic character as predictors. We built candidate models (n = 23) considering all combinations of variables and a null model and classified the models according to the low [AICc](https://www.zotero.org/google-docs/?aJFULL).

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**Supplementary Table 3**. Relative importance of the variables used as predictors of changes in the distribution of Cerrado anurans in response to climate change.

|  |  |
| --- | --- |
| **Variables** | **Relative variable importance** |
| Ecoregion | 0.992 |
| Elevation | 0.792 |
| SVL | 0.056 |
| Distribution pattern | 0.034 |
| Habitat | 0.014 |
| Reproductive pattern | 0.013 |

**Supplementary Table 4**. Average model estimates (estimate), unconditional standard errors (SE), Z value and confidence intervals of fixed effects in generalized linear models (GLM) that test the predictive power of range characteristics and life history traits of species as correlates of changes in the potential distribution area in response to climate change.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **Estimate** | **Std. Error** | **Z value** | **Lower 95% CI** | **Upper 95% CI** |
| (Intercept) | 0.595 | 0.263 | 2.232 | 0.073 | 1.118 |
| **Elevation (highland)** | -0.420 | 0.164 | 2.503 | **-0.748** | **-0.091** |
| **Ecoregion (2)** | -0.749 | 0.207 | 3.561 | **-1.161** | **-0.337** |
| SVL | -0.003 | 0.003 | 1.043 | -0.008 | 0.003 |
| Distribution pattern (endemic) | -0.061 | 0.183 | 0.326 | -0.428 | 0.306 |
| Habitat (rupestrian fields) | -0.550 | 0.386 | 1.395 | -1.322 | 0.222 |
| Habitat (forest) | -0.231 | 0.262 | 0.863 | -0.755 | 0.293 |
| Habitat (both forest and open area) | 0.027 | 0.180 | 0.148 | -0.334 | 0.388 |
| Reproductive pattern (explosive) | -0.111 | 0.317 | 0.343 | -0.745 | 0.523 |
| Reproductive pattern (prolongated) | 0.021 | 0.285 | 0.071 | -0.550 | 0.591 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Specie** | **Climatic scenario** | **Current (km²)** | **Future (km²)** | **Ecoregion** | **Elevation** | **SVL (mm)** | **Distribution** | **Habitat** | **Reproduction pattern** | **Records number** |
| *Adenomera hylaedactyla* | optimistic | 2774713 | 1954632 | ecoregion 2 | lowland | 22 | widespread | forest and open area | prolongated | 19 |
| *Ameerega flavopicta* | optimistic | 1381027 | 398803 | ecoregion 2 | highland | 30 | widespread | rupestrian fields | prolongated | 37 |
| *Boana albopunctata* | optimistic | 2012698 | 875014 | ecoregion 2 | highland | 60 | widespread | forest and open area | prolongated | 77 |
| *Boana crepitans* | optimistic | 1814440 | 2431746 | ecoregion 2 | lowland | 59 | widespread | forest and open area | prolongated | 19 |
| *Boana faber* | optimistic | 624042 | 242767 | ecoregion 2 | highland | 80 | widespread | forest | explosive | 34 |
| *Boana lundii* | optimistic | 775007 | 287308 | ecoregion 2 | highland | 70.8 | endemic | forest | prolongated | 43 |
| *Boana multifasciata* | optimistic | 1006112 | 1249348 | ecoregion 2 | lowland | 83 | widespread | open area | prolongated | 17 |
| *Boana punctata* | optimistic | 2199447 | 1789678 | ecoregion 2 | lowland | 36.9 | widespread | forest and open area | prolongated | 27 |
| *Boana raniceps* | optimistic | 2203818 | 1771961 | ecoregion 2 | lowland | 75 | widespread | forest and open area | prolongated | 78 |
| *Bokermannohyla saxicola* | optimistic | 100514 | 108150 | ecoregion 1 | highland | 55 | endemic | rupestrian fields | prolongated | 17 |
| *Chiasmocleis albopunctata* | optimistic | 1795650 | 883994 | ecoregion 2 | highland | 24.94 | endemic | open area | explosive | 61 |
| *Dendropsophus cruzi* | optimistic | 2278000 | 1664794 | ecoregion 2 | lowland | 19.4 | endemic | open area | prolongated | 26 |
| *Dendropsophus elianeae* | optimistic | 1815286 | 1253972 | ecoregion 1 | highland | 22.8 | endemic | open area | prolongated | 35 |
| *Dendropsophus jimi* | optimistic | 1642002 | 584134 | ecoregion 2 | highland | 18.78 | endemic | open area | prolongated | 20 |
| *Dendropsophus melanargyreus* | optimistic | 3140538 | 2645155 | ecoregion 2 | lowland | 40.9 | widespread | forest and open area | explosive | 29 |
| *Dendropsophus minutus* | optimistic | 2495312 | 1797062 | ecoregion 2 | highland | 23 | widespread | forest and open area | prolongated | 154 |
| *Dendropsophus nanus* | optimistic | 2596934 | 2149027 | ecoregion 2 | lowland | 19.87 | widespread | forest and open area | prolongated | 125 |
| *Dendropsophus rubicundulus* | optimistic | 1907434 | 1802307 | ecoregion 2 | highland | 23.4 | endemic | open area | prolongated | 58 |
| *Dendropsophus sanborni* | optimistic | 1154204 | 782090 | ecoregion 1 | highland | 21.1 | widespread | open area | prolongated | 19 |
| *Elachistocleis bicolor* | optimistic | 2129168 | 2093544 | ecoregion 2 | highland | 43 | widespread | forest and open area | explosive | 16 |
| *Elachistocleis cesarii* | optimistic | 1798667 | 905965 | ecoregion 2 | highland | 24.94 | widespread | open area | prolongated and explosive | 44 |
| *Leptodactylus bolivianus* | optimistic | 1628540 | 2971143 | ecoregion 2 | lowland | 60 | endemic | forest and open area | explosive | 15 |
| *Leptodactylus chaquensis* | optimistic | 2548658 | 2672618 | ecoregion 2 | lowland | 82 | widespread | open area | prolongated and explosive | 83 |
| *Leptodactylus cunicularius* | optimistic | 178385 | 3008923 | ecoregion 1 | highland | 46 | widespread | open area | prolongated | 11 |
| *Leptodactylus elenae* | optimistic | 2596935 | 1550564 | ecoregion 2 | highland | 50 | widespread | open area | prolongated | 19 |
| *Leptodactylus furnarius* | optimistic | 1558271 | 1016836 | ecoregion 2 | highland | 44 | widespread | open area | prolongated | 44 |
| *Leptodactylus fuscus* | optimistic | 2756358 | 2632630 | ecoregion 2 | lowland | 47.2 | widespread | open area | prolongated | 166 |
| *Leptodactylus labyrinthicus* | optimistic | 2052460 | 1198631 | ecoregion 2 | highland | 188 | widespread | forest and open area | prolongated | 127 |
| *Leptodactylus latrans* | optimistic | 2231594 | 2195994 | ecoregion 2 | highland | 83.22 | widespread | forest and open area | prolongated | 71 |
| *Leptodactylus mystaceus* | optimistic | 1962514 | 1409604 | ecoregion 2 | highland | 47.14 | widespread | forest | prolongated | 74 |
| *Leptodactylus mystacinus* | optimistic | 1866075 | 1428677 | ecoregion 2 | highland | 55.8 | widespread | open area | explosive | 83 |
| *Leptodactylus petersii* | optimistic | 2761455 | 1607616 | ecoregion 2 | lowland | 37.5 | widespread | forest and open area | prolongated | 14 |
| *Leptodactylus podicipinus* | optimistic | 2016760 | 2110548 | ecoregion 2 | lowland | 54 | widespread | open area | prolongated | 125 |
| *Leptodactylus pustulatus* | optimistic | 1098424 | 2044486 | ecoregion 2 | lowland | 36.22 | widespread | open area | prolongated | 23 |
| *Leptodactylus syphax* | optimistic | 2488970 | 1595670 | ecoregion 2 | highland | 78 | widespread | forest and open area | prolongated | 37 |
| *Leptodactylus troglodytes* | optimistic | 1537966 | 1256163 | ecoregion 2 | lowland | 40 | widespread | open area | prolongated and explosive | 31 |
| *Odontophrynus americanus* | optimistic | 902475 | 780889 | ecoregion 1 | highland | 51 | widespread | open area | prolongated and explosive | 20 |
| *Odontophrynus cultripes* | optimistic | 924595 | 419813 | ecoregion 2 | highland | 50 | endemic | open area | prolongated and explosive | 19 |
| *Physalaemus albifrons* | optimistic | 1063957 | 1064569 | ecoregion 1 | lowland | 25 | widespread | open area | prolongated | 11 |
| *Physalaemus albonotatus* | optimistic | 2220053 | 1456066 | ecoregion 2 | lowland | 34.1 | widespread | open area | prolongated | 30 |
| *Physalaemus centralis* | optimistic | 2759552 | 2126026 | ecoregion 2 | lowland | 39.2 | endemic | forest and open area | explosive | 101 |
| *Physalaemus cicada* | optimistic | 884407 | 1936604 | ecoregion 1 | highland | 25.38 | widespread | open area | explosive | 12 |
| *Physalaemus cuvieri* | optimistic | 2691951 | 1228987 | ecoregion 2 | lowland | 29.17 | widespread | open area | prolongated | 193 |
| *Physalaemus nattereri* | optimistic | 2313880 | 1503552 | ecoregion 2 | highland | 29.8 | widespread | open area | explosive | 133 |
| *Proceratophrys goyana* | optimistic | 1394075 | 3005683 | ecoregion 2 | lowland | 38.8 | endemic | forest and open area | prolongated | 14 |
| *Pseudis bolbodactyla* | optimistic | 2796681 | 2551385 | ecoregion 2 | lowland | 45 | widespread | open area | prolongated | 26 |
| *Pseudis platensis* | optimistic | 1152254 | 1325070 | ecoregion 1 | highland | 57.5 | widespread | open area | prolongated | 21 |
| *Pseudopaludicola falcipes* | optimistic | 2705029 | 3257074 | ecoregion 2 | lowland | 18.1 | widespread | open area | explosive | 25 |
| *Pseudopaludicola mineira* | optimistic | 220380 | 926533 | ecoregion 1 | highland | 17.4 | endemic | open area | explosive | 12 |
| *Pseudopaludicola mystacalis* | optimistic | 2203559 | 2623574 | ecoregion 2 | lowland | 16.1 | widespread | open area | prolongated | 55 |
| *Pseudopaludicola saltica* | optimistic | 1675466 | 2072925 | ecoregion 2 | highland | 13.8 | widespread | open area | prolongated | 25 |
| *Rhinella diptycha* | optimistic | 1639811 | 631405 | ecoregion 2 | highland | 100 | widespread | open area | explosive | 150 |
| *Rhinella margaritifera* | optimistic | 1542018 | 911073 | ecoregion 2 | lowland | 74 | widespread | forest | explosive | 16 |
| *Rhinella ornata* | optimistic | 1281292 | 531838 | ecoregion 2 | highland | 84.29 | widespread | forest | prolongated | 29 |
| *Rhinella rubescens* | optimistic | 842368 | 241663 | ecoregion 1 | highland | 100 | endemic | open area | explosive | 44 |
| *Rhinella scitula* | optimistic | 633938 | 353033 | ecoregion 2 | highland | 48 | endemic | forest | explosive | 15 |
| *Scinax catharinae* | optimistic | 637927 | 2241903 | ecoregion 1 | highland | 45.5 | endemic | forest | prolongated | 10 |
| *Scinax fuscomarginatus* | optimistic | 2385586 | 1534336 | ecoregion 2 | lowland | 22.21 | widespread | open area | prolongated | 107 |
| *Scinax fuscovarius* | optimistic | 1865884 | 933843 | ecoregion 2 | highland | 47 | widespread | forest and open area | prolongated | 205 |
| *Scinax nasicus* | optimistic | 2242403 | 1547550 | ecoregion 2 | lowland | 39 | endemic | forest and open area | prolongated and explosive | 20 |
| *Scinax squalirostris* | optimistic | 496630 | 207493 | ecoregion 1 | highland | 29 | widespread | forest and open area | prolongated | 20 |
| *Thoropa megatympanum* | optimistic | 104367 | 99311 | ecoregion 1 | highland | 53 | endemic | rupestrian fields | prolongated | 15 |
| *Trachycephalus nigromaculatus* | optimistic | 638708 | 1046954 | ecoregion 1 | highland | 91.05 | widespread | forest and open area | explosive | 11 |
| *Adenomera hylaedactyla* | pessimistic | 2774713 | 1782700 | ecoregion 2 | lowland | 22 | widespread | forest and open area | prolongated | 19 |
| *Ameerega flavopicta* | pessimistic | 1381027 | 190560 | ecoregion 2 | highland | 30 | widespread | rupestrian fields | prolongated | 37 |
| *Boana albopunctata* | pessimistic | 2012698 | 810548 | ecoregion 2 | highland | 60 | widespread | forest and open area | prolongated | 77 |
| *Boana crepitans* | pessimistic | 1814440 | 2655664 | ecoregion 2 | lowland | 59 | widespread | forest and open area | prolongated | 19 |
| *Boana faber* | pessimistic | 624042 | 183924 | ecoregion 2 | highland | 80 | widespread | forest | explosive | 34 |
| *Boana lundii* | pessimistic | 775007 | 222961 | ecoregion 2 | highland | 70.8 | endemic | forest | prolongated | 43 |
| *Boana multifasciata* | pessimistic | 1006112 | 1278096 | ecoregion 2 | lowland | 83 | widespread | open area | prolongated | 17 |
| *Boana punctata* | pessimistic | 2199447 | 1650358 | ecoregion 2 | lowland | 36.9 | widespread | forest and open area | prolongated | 27 |
| *Boana raniceps* | pessimistic | 2203818 | 1627149 | ecoregion 2 | lowland | 75 | widespread | forest and open area | prolongated | 78 |
| *Bokermannohyla saxicola* | pessimistic | 100514 | 136551 | ecoregion 1 | highland | 55 | endemic | rupestrian fields | prolongated | 17 |
| *Chiasmocleis albopunctata* | pessimistic | 1795650 | 641941 | ecoregion 2 | highland | 24.94 | endemic | open area | explosive | 61 |
| *Dendropsophus cruzi* | pessimistic | 2278000 | 1591790 | ecoregion 2 | lowland | 19.4 | endemic | open area | prolongated | 26 |
| *Dendropsophus elianeae* | pessimistic | 1815286 | 1393837 | ecoregion 1 | highland | 22.8 | endemic | open area | prolongated | 35 |
| *Dendropsophus jimi* | pessimistic | 1642002 | 499479 | ecoregion 2 | highland | 18.78 | endemic | open area | prolongated | 20 |
| *Dendropsophus melanargyreus* | pessimistic | 3140538 | 2558688 | ecoregion 2 | lowland | 40.9 | widespread | forest and open area | explosive | 29 |
| *Dendropsophus minutus* | pessimistic | 2495312 | 1460311 | ecoregion 2 | highland | 23 | widespread | forest and open area | prolongated | 154 |
| *Dendropsophus nanus* | pessimistic | 2596934 | 2125870 | ecoregion 2 | lowland | 19.87 | widespread | forest and open area | prolongated | 125 |
| *Dendropsophus rubicundulus* | pessimistic | 1907434 | 2014850 | ecoregion 2 | highland | 23.4 | endemic | open area | prolongated | 58 |
| *Dendropsophus sanborni* | pessimistic | 1154204 | 763528 | ecoregion 1 | highland | 21.1 | widespread | open area | prolongated | 19 |
| *Elachistocleis bicolor* | pessimistic | 2129168 | 2179920 | ecoregion 2 | highland | 43 | widespread | forest and open area | explosive | 16 |
| *Elachistocleis cesarii* | pessimistic | 1798667 | 976048 | ecoregion 2 | highland | 24.94 | widespread | open area | prolongated and explosive | 44 |
| *Leptodactylus bolivianus* | pessimistic | 1628540 | 3210002 | ecoregion 2 | lowland | 60 | endemic | forest and open area | explosive | 15 |
| *Leptodactylus chaquensis* | pessimistic | 2548658 | 2656391 | ecoregion 2 | lowland | 82 | widespread | open area | prolongated and explosive | 83 |
| *Leptodactylus cunicularius* | pessimistic | 178385 | 3001391 | ecoregion 1 | highland | 46 | widespread | open area | prolongated | 11 |
| *Leptodactylus elenae* | pessimistic | 2596935 | 1446924 | ecoregion 2 | highland | 50 | widespread | open area | prolongated | 19 |
| *Leptodactylus furnarius* | pessimistic | 1558271 | 1154016 | ecoregion 2 | highland | 44 | widespread | open area | prolongated | 44 |
| *Leptodactylus fuscus* | pessimistic | 2756358 | 2647176 | ecoregion 2 | lowland | 47.2 | widespread | open area | prolongated | 166 |
| *Leptodactylus labyrinthicus* | pessimistic | 2052460 | 1046731 | ecoregion 2 | highland | 188 | widespread | forest and open area | prolongated | 127 |
| *Leptodactylus latrans* | pessimistic | 2231594 | 2442077 | ecoregion 2 | highland | 83.22 | widespread | forest and open area | prolongated | 71 |
| *Leptodactylus mystaceus* | pessimistic | 1962514 | 1535216 | ecoregion 2 | highland | 47.14 | widespread | forest | prolongated | 74 |
| *Leptodactylus mystacinus* | pessimistic | 1866075 | 1613407 | ecoregion 2 | highland | 55.8 | widespread | open area | explosive | 83 |
| *Leptodactylus petersii* | pessimistic | 2761455 | 1757239 | ecoregion 2 | lowland | 37.5 | widespread | forest and open area | prolongated | 14 |
| *Leptodactylus podicipinus* | pessimistic | 2016760 | 2032679 | ecoregion 2 | lowland | 54 | widespread | open area | prolongated | 125 |
| *Leptodactylus pustulatus* | pessimistic | 1098424 | 2158748 | ecoregion 2 | lowland | 36.22 | widespread | open area | prolongated | 23 |
| *Leptodactylus syphax* | pessimistic | 2488970 | 1444645 | ecoregion 2 | highland | 78 | widespread | forest and open area | prolongated | 37 |
| *Leptodactylus troglodytes* | pessimistic | 1537966 | 1125995 | ecoregion 2 | lowland | 40 | widespread | open area | prolongated and explosive | 31 |
| *Odontophrynus americanus* | pessimistic | 902475 | 887346 | ecoregion 1 | highland | 51 | widespread | open area | prolongated and explosive | 20 |
| *Odontophrynus cultripes* | pessimistic | 924595 | 288125 | ecoregion 2 | highland | 50 | endemic | open area | prolongated and explosive | 19 |
| *Physalaemus albifrons* | pessimistic | 1063957 | 1065531 | ecoregion 1 | lowland | 25 | widespread | open area | prolongated | 11 |
| *Physalaemus albonotatus* | pessimistic | 2220053 | 1260149 | ecoregion 2 | lowland | 34.1 | widespread | open area | prolongated | 30 |
| *Physalaemus centralis* | pessimistic | 2759552 | 1911204 | ecoregion 2 | lowland | 39.2 | endemic | forest and open area | explosive | 101 |
| *Physalaemus cicada* | pessimistic | 884407 | 1801069 | ecoregion 1 | highland | 25.38 | widespread | open area | explosive | 12 |
| *Physalaemus cuvieri* | pessimistic | 2691951 | 1064633 | ecoregion 2 | lowland | 29.17 | widespread | open area | prolongated | 193 |
| *Physalaemus nattereri* | pessimistic | 2313880 | 1305747 | ecoregion 2 | highland | 29.8 | widespread | open area | explosive | 133 |
| *proceratophrys goyana* | pessimistic | 1394075 | 2926622 | ecoregion 2 | lowland | 38.8 | endemic | forest and open area | prolongated | 14 |
| *Pseudis bolbodactyla* | pessimistic | 2796681 | 2702654 | ecoregion 2 | lowland | 45 | widespread | open area | prolongated | 26 |
| *Pseudis platensis* | pessimistic | 1152254 | 1182731 | ecoregion 1 | highland | 57.5 | widespread | open area | prolongated | 21 |
| *Pseudopaludicola falcipes* | pessimistic | 2705029 | 3592086 | ecoregion 2 | lowland | 18.1 | widespread | open area | explosive | 25 |
| *Pseudopaludicola mineira* | pessimistic | 220380 | 830318 | ecoregion 1 | highland | 17.4 | endemic | open area | explosive | 12 |
| *Pseudopaludicola mystacalis* | pessimistic | 2203559 | 2811184 | ecoregion 2 | lowland | 16.1 | widespread | open area | prolongated | 55 |
| *Pseudopaludicola saltica* | pessimistic | 1675466 | 1780622 | ecoregion 2 | highland | 13.8 | widespread | open area | prolongated | 25 |
| *Rhinella diptycha* | pessimistic | 1639811 | 452284 | ecoregion 2 | highland | 100 | widespread | open area | explosive | 150 |
| *Rhinella margaritifera* | pessimistic | 1542018 | 739604 | ecoregion 2 | lowland | 74 | widespread | forest | explosive | 16 |
| *Rhinella ornata* | pessimistic | 1281292 | 437813 | ecoregion 2 | highland | 84.29 | widespread | forest | prolongated | 29 |
| *Rhinella rubescens* | pessimistic | 842368 | 181504 | ecoregion 1 | highland | 100 | endemic | open area | explosive | 44 |
| *Rhinella scitula* | pessimistic | 633938 | 233918 | ecoregion 2 | highland | 48 | endemic | forest | explosive | 15 |
| *Scinax catharinae* | pessimistic | 637927 | 2021152 | ecoregion 1 | highland | 45.5 | endemic | forest | prolongated | 10 |
| *Scinax fuscomarginatus* | pessimistic | 2385586 | 1213671 | ecoregion 2 | lowland | 22.21 | widespread | open area | prolongated | 107 |
| *Scinax fuscovarius* | pessimistic | 1865884 | 741112 | ecoregion 2 | highland | 47 | widespread | forest and open area | prolongated | 205 |
| *Scinax nasicus* | pessimistic | 2242403 | 1484731 | ecoregion 2 | lowland | 39 | endemic | forest and open area | prolongated and explosive | 20 |
| *Scinax squalirostris* | pessimistic | 496630 | 197882 | ecoregion 1 | highland | 29 | widespread | forest and open area | prolongated | 20 |
| *Thoropa megatympanum* | pessimistic | 104367 | 120948 | ecoregion 1 | highland | 53 | endemic | rupestrian fields | prolongated | 15 |
| *Trachycephalus nigromaculatus* | pessimistic | 638708 | 1001914 | ecoregion 1 | highland | 91.05 | widespread | forest and open area | explosive | 11 |