

Supplementary Materials

Barcoding Gaps and Sequencing Prioritisation in a Global Biodiversity Stronghold

1. Primer completeness, depth, and ambiguity – additional plots

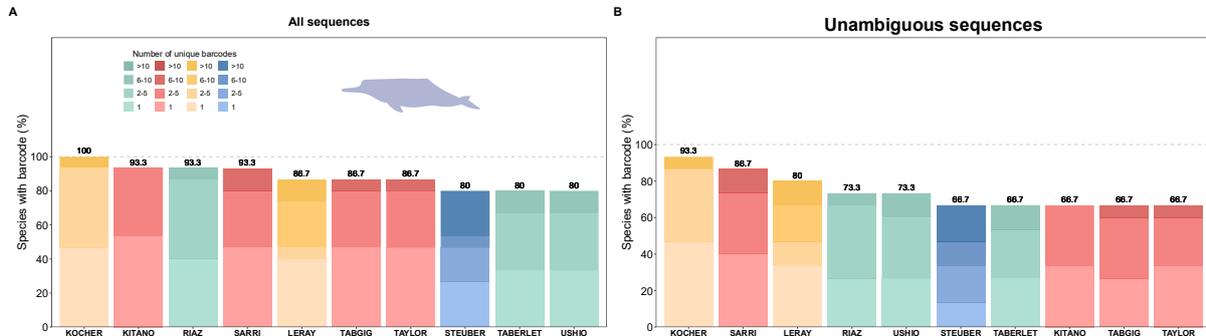


Figure S1: Percentage of Artiodactyla (n = 15) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

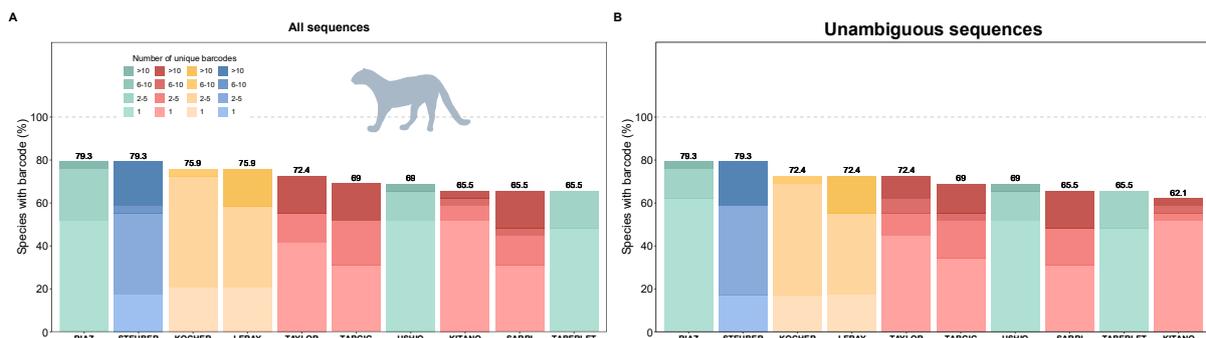


Figure S2: Percentage of Carnivora (n = 29) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

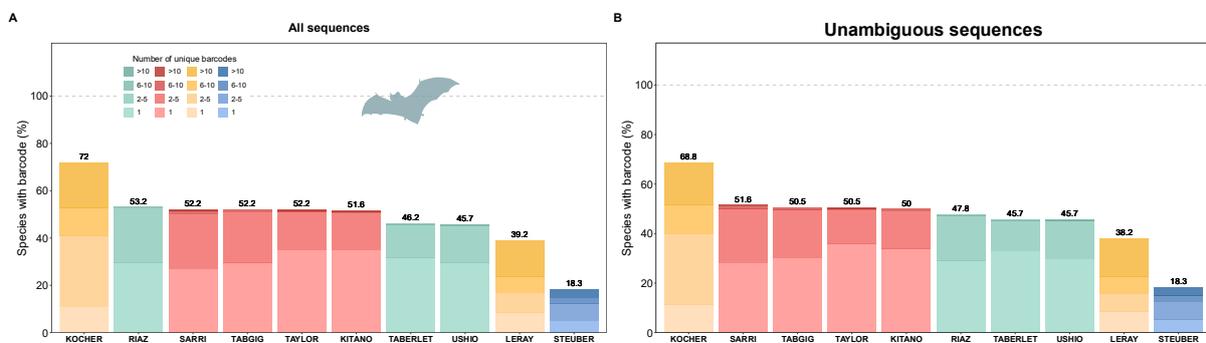


Figure S3: Percentage of Chiroptera (n = 186) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.).

unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

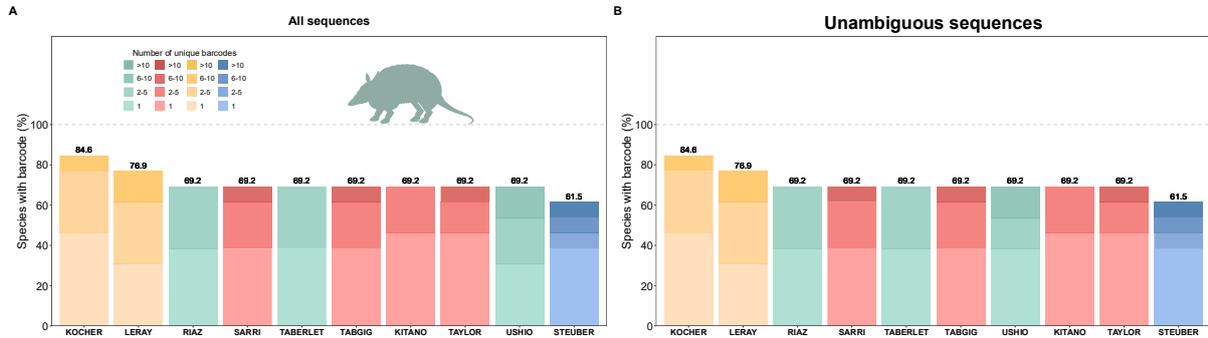


Figure S4: Percentage of Cingulata (n = 13) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

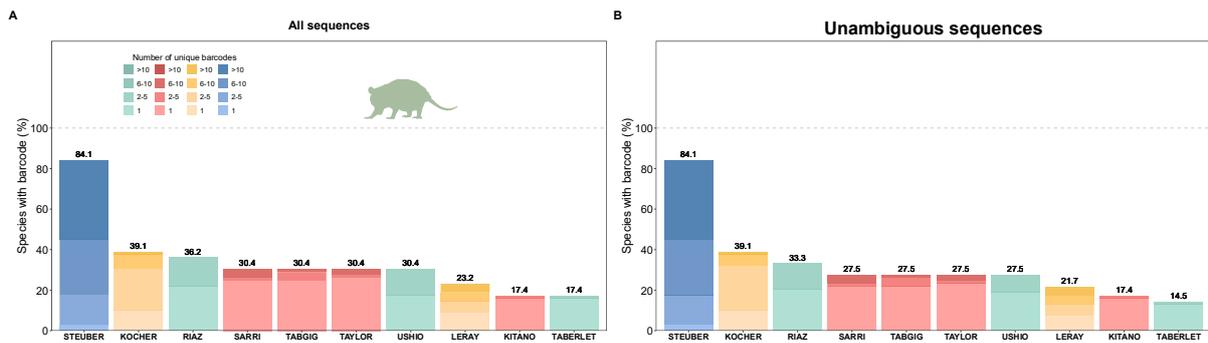


Figure S5: Percentage of Didelphimorphia (n = 69) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

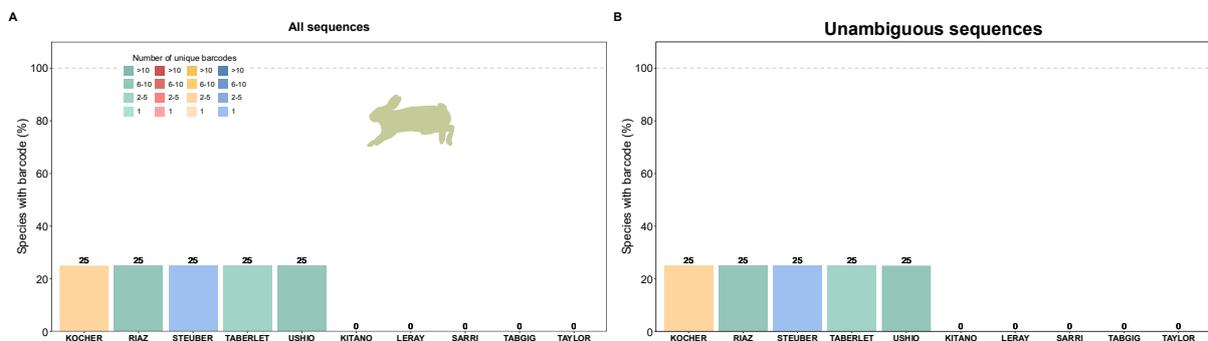


Figure S6: Percentage of Lagomorpha (n = 4) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

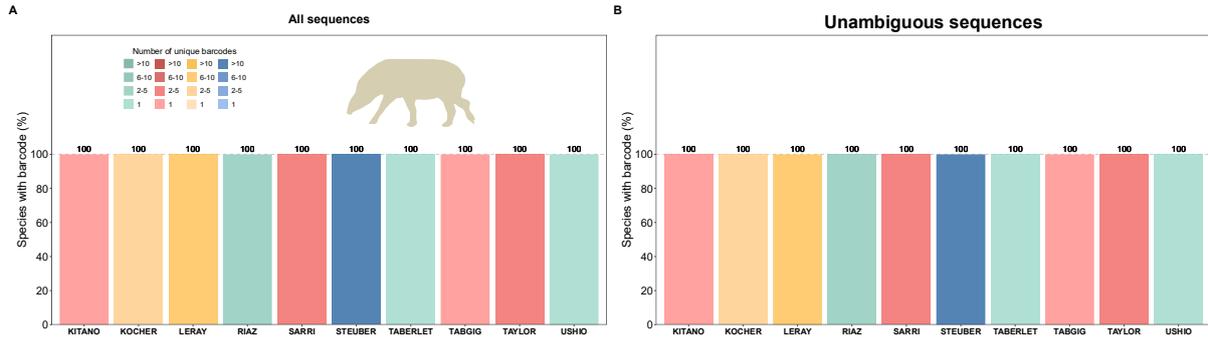


Figure S7: Percentage of Perissodactyla ($n = 1$) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

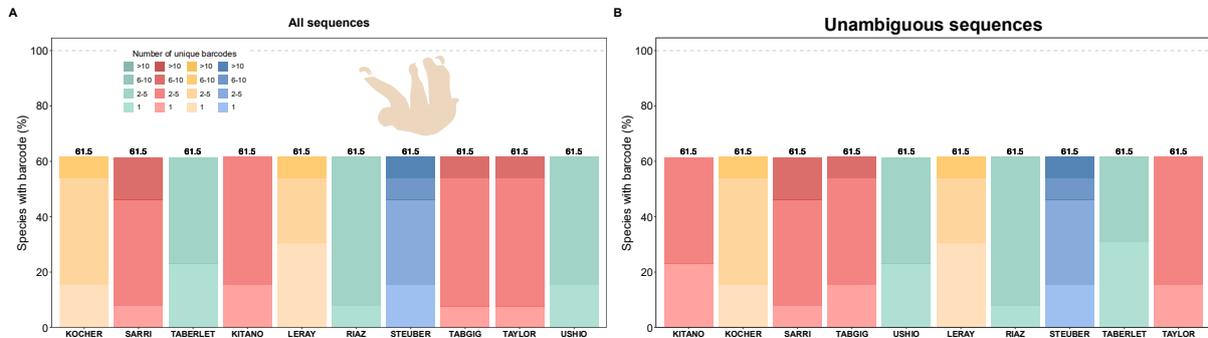


Figure S8: Percentage of Pilosa ($n = 13$) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

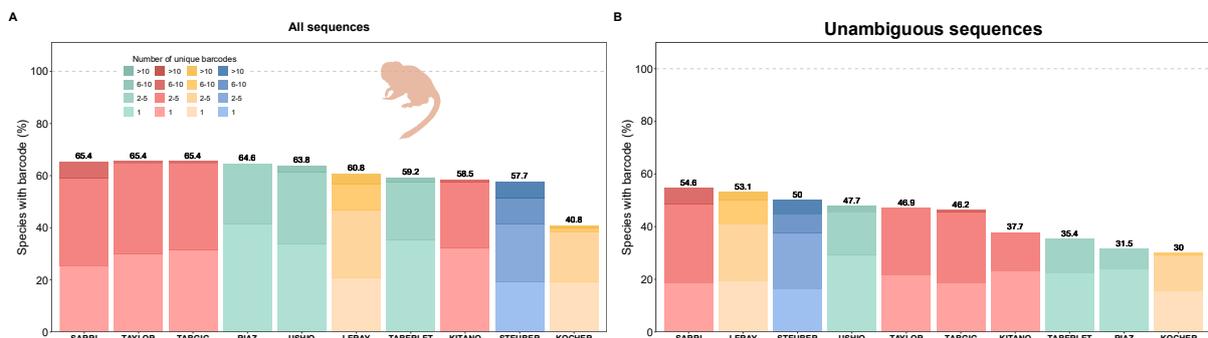


Figure S9: Percentage of Primates ($n = 130$) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

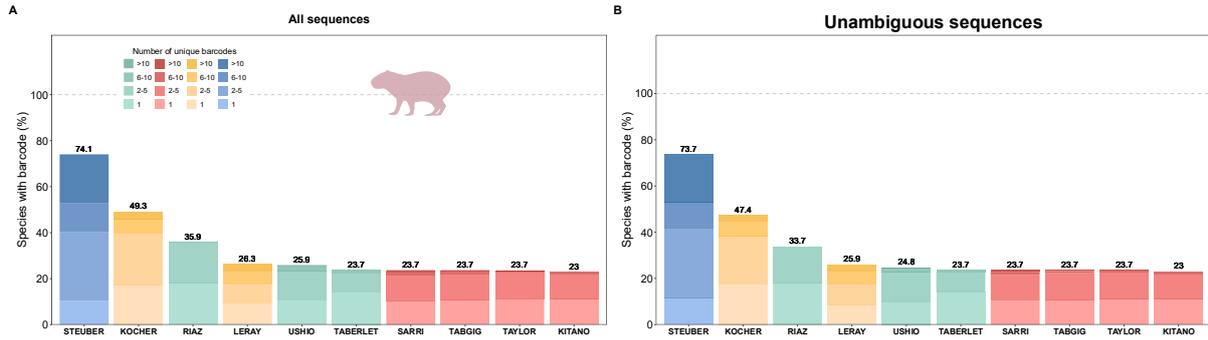


Figure S10: Percentage of Rodentia ($n = 270$) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

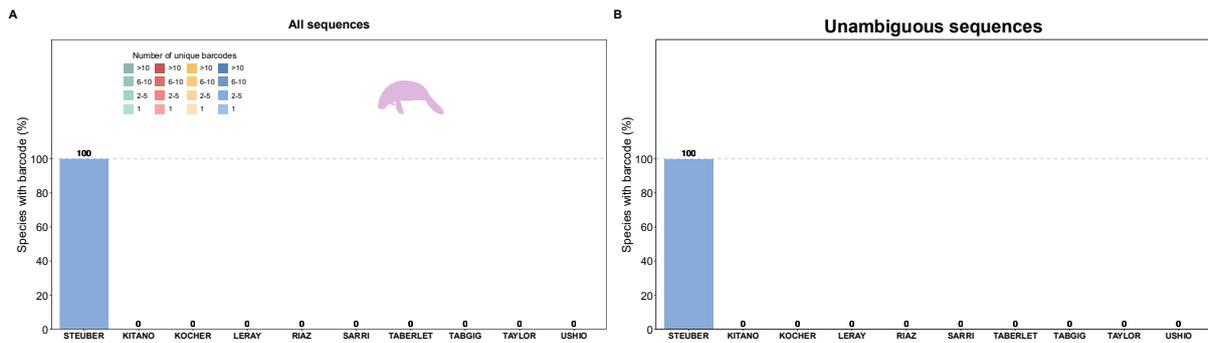


Figure S11: Percentage of Sirenia ($n = 1$) species with reference barcodes across ten primer combinations (12S: green; 16S: red; COI: yellow; CytB: blue), for all sequences (A.) and unambiguous sequences (B.). Stacked bars show haplotypic depth: species with 1, 2–5, 6–10, or >10 unique barcodes.

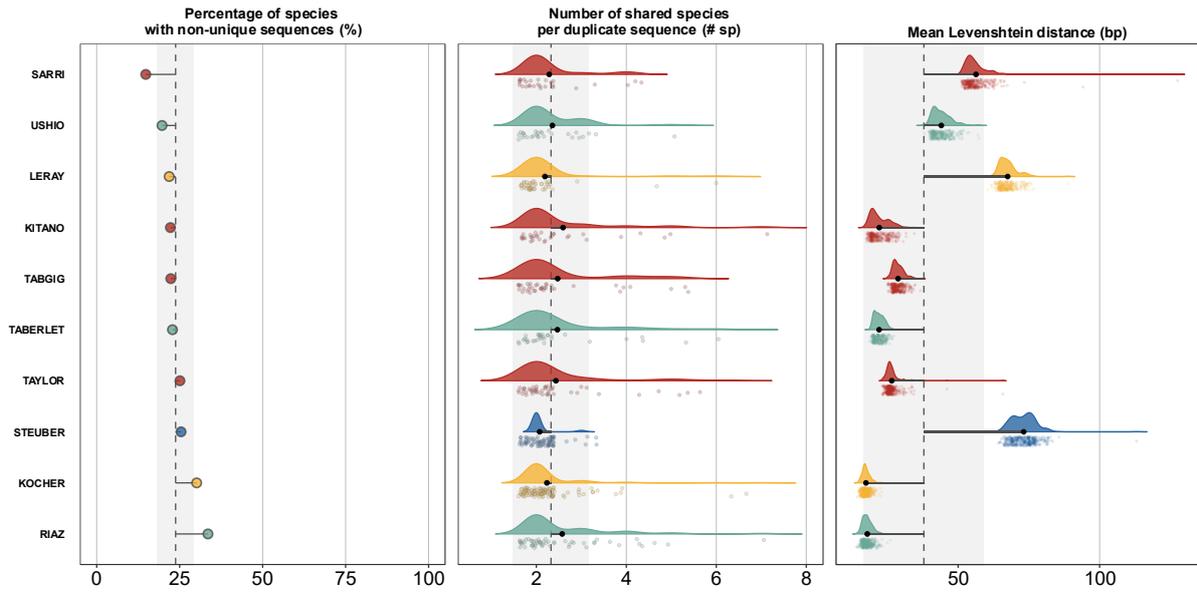


Figure S12: Ambiguity across markers, coloured by mitochondrial region (12S, green; 16S, red; COI, yellow; CytB, blue). Left: Percentage of species with a reference-database sequence that is shared with at least one other species. Middle: Number of species sharing each ambiguous sequence. Right: Mean pairwise Levenshtein distance among sequences.

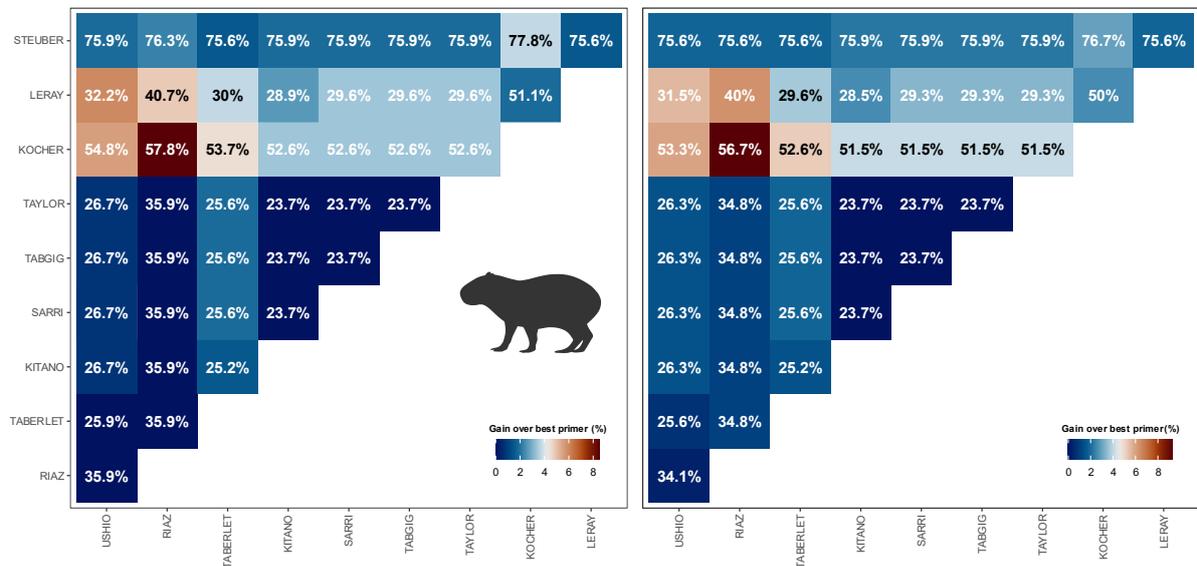


Figure S13: Heatmap showing complementarity in reference-database completeness for Rodentia across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

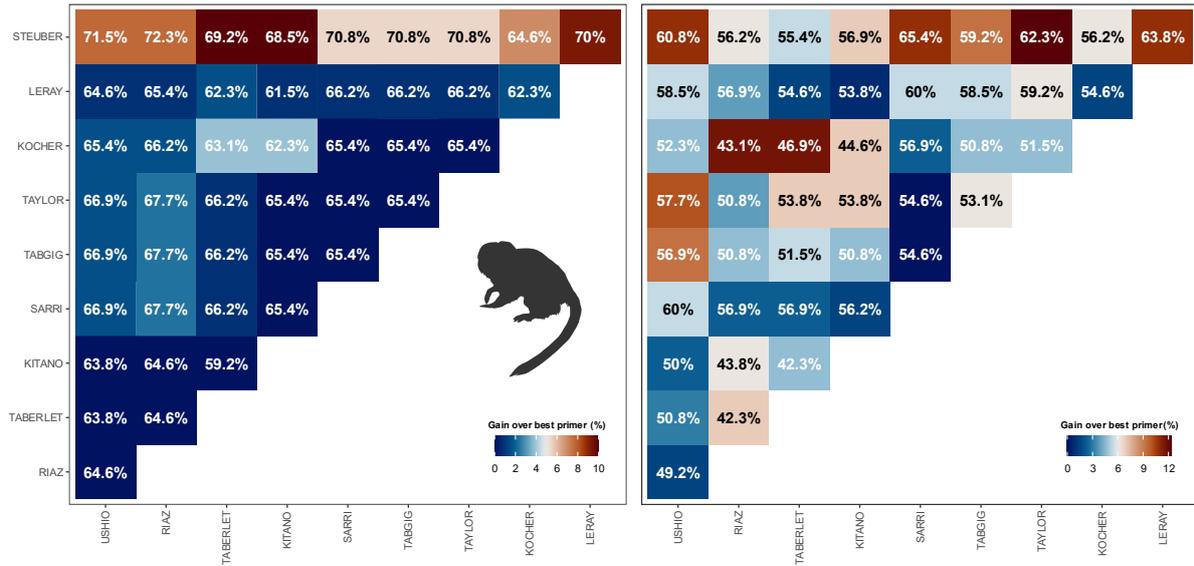


Figure S14: Heatmap showing complementarity in reference-database completeness for Primates across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

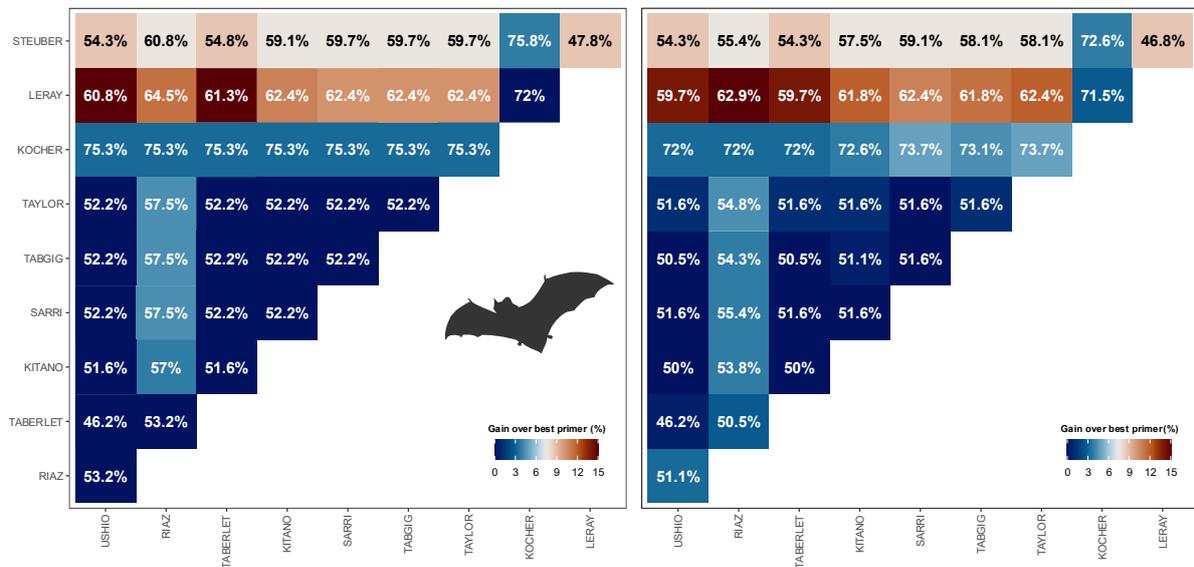


Figure S15: Heatmap showing complementarity in reference-database completeness for Chiroptera across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

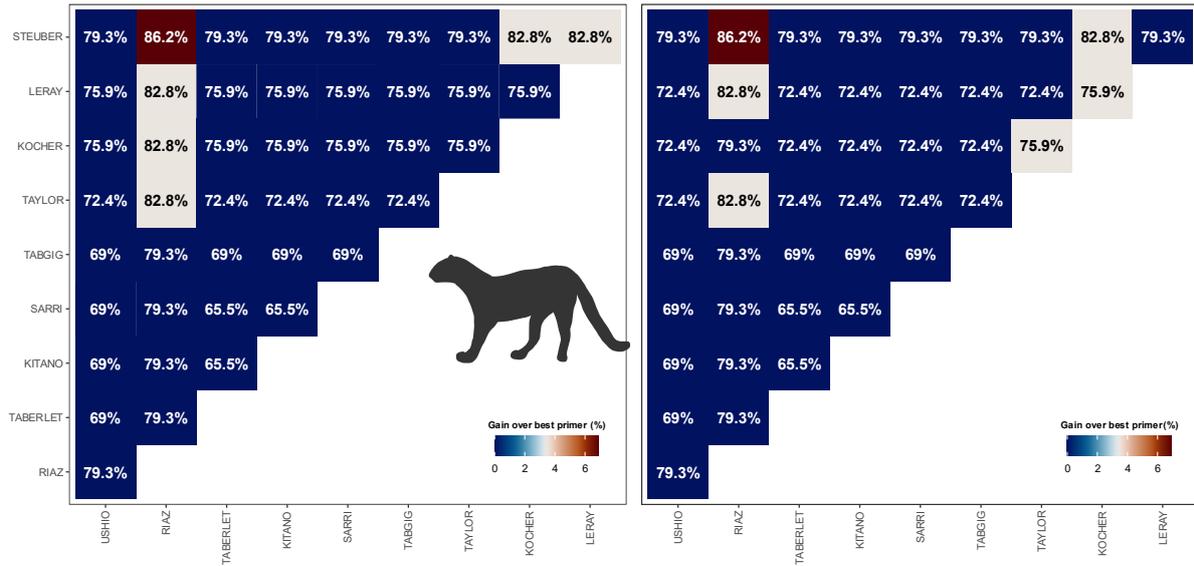


Figure S16: Heatmap showing complementarity in reference-database completeness for Carnivora across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

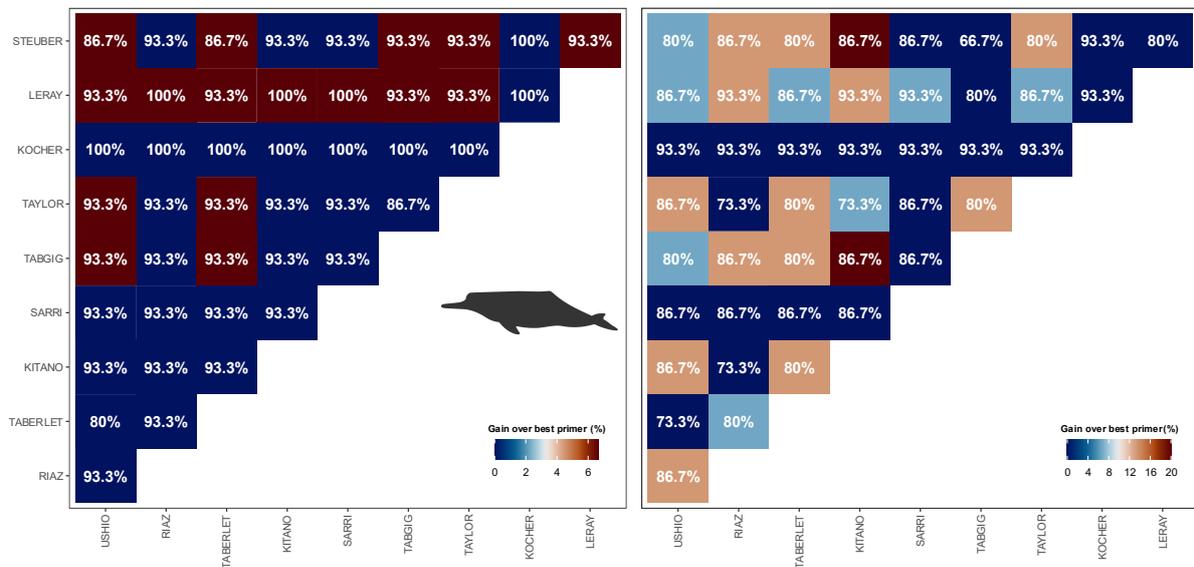


Figure S17: Heatmap showing complementarity in reference-database completeness for Artiodactyla across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

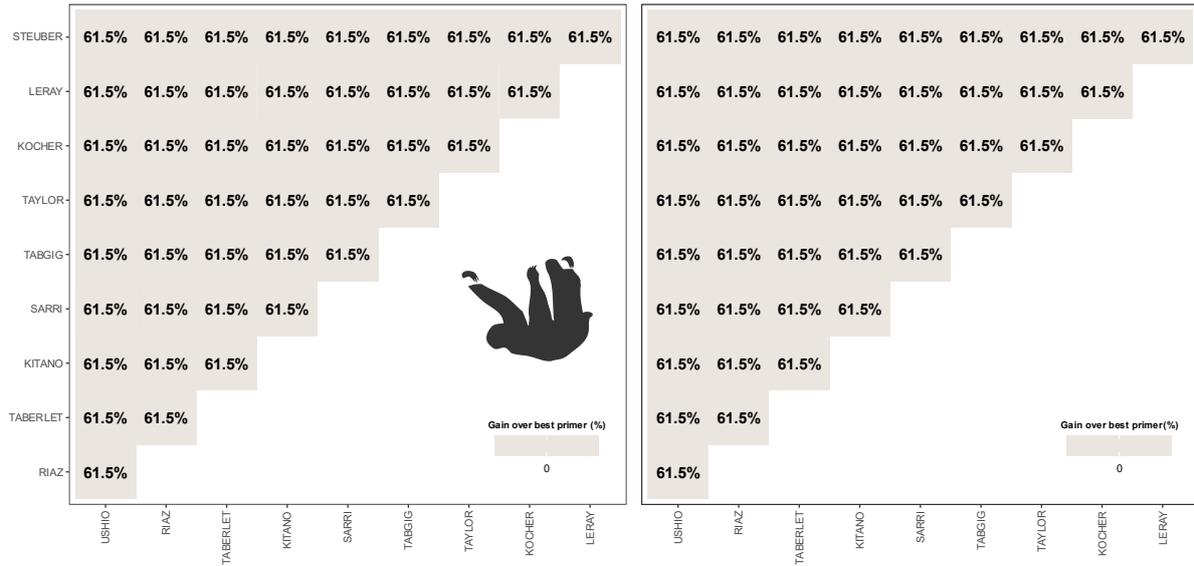


Figure S18: Heatmap showing complementarity in reference-database completeness for Pilosa across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

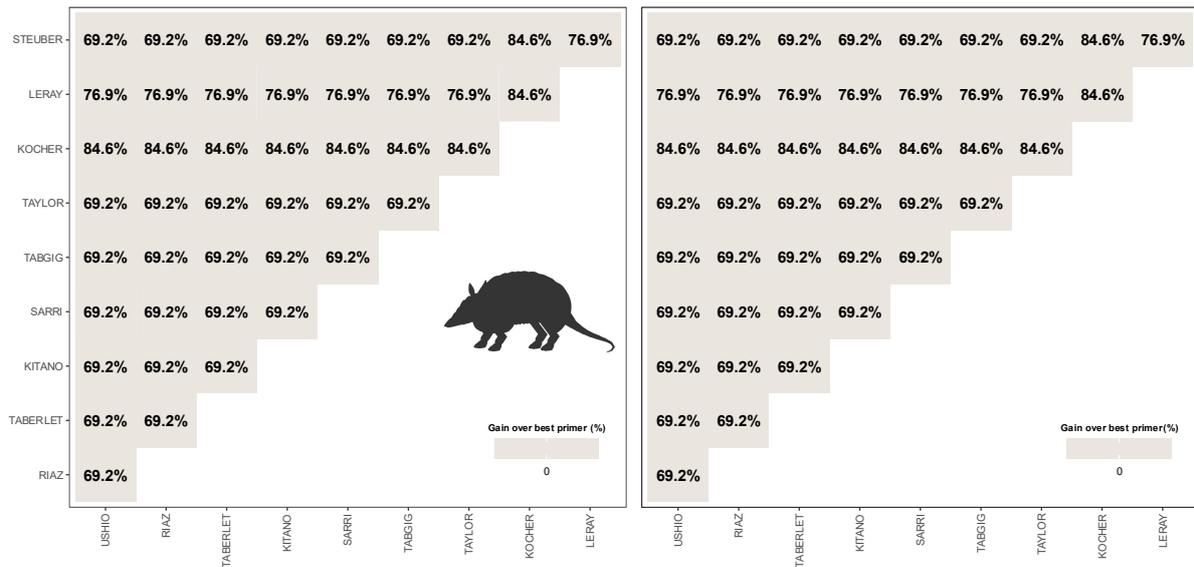


Figure S19: Heatmap showing complementarity in reference-database completeness for Cingulata across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

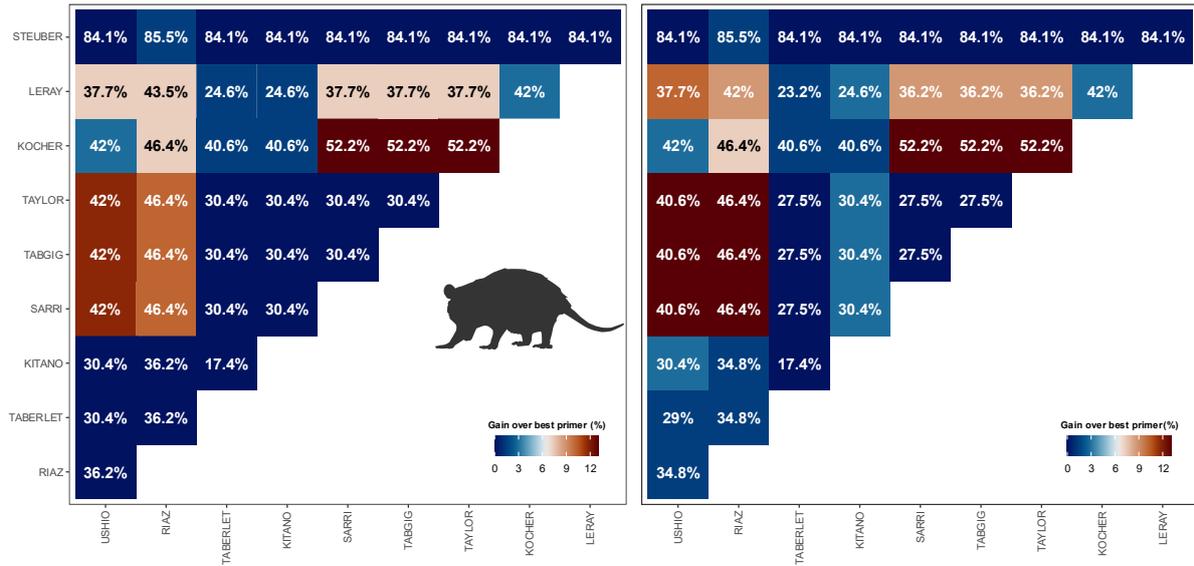


Figure S20: Heatmap showing complementarity in reference-database completeness for Didelphimorphia across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

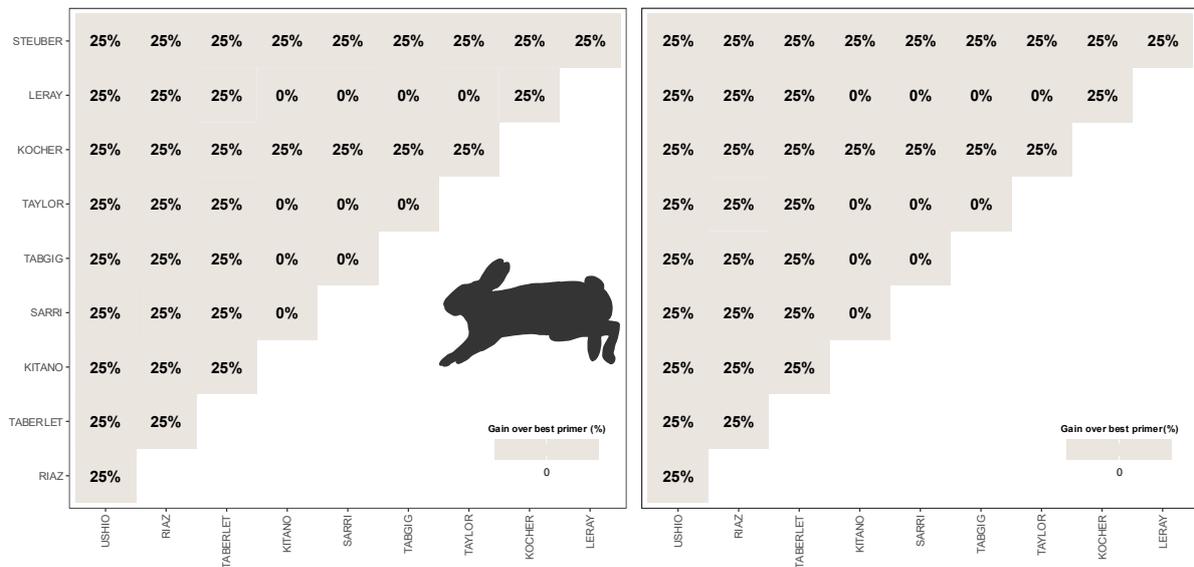


Figure S21: Heatmap showing complementarity in reference-database completeness for Lagomorpha across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

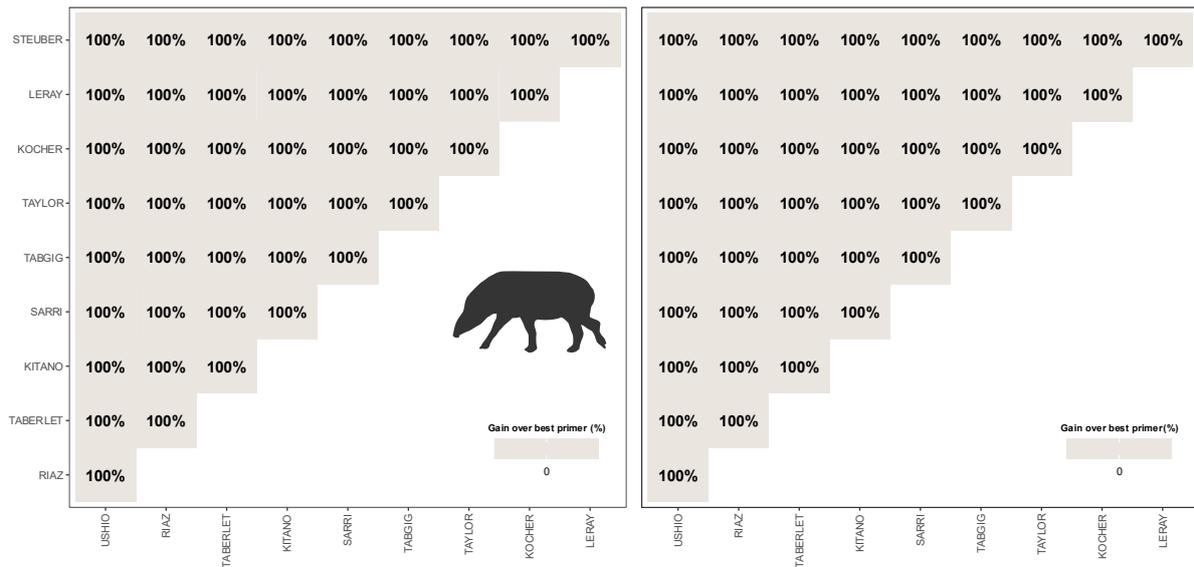


Figure S22: Heatmap showing complementarity in reference-database completeness for Perissodactyla across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

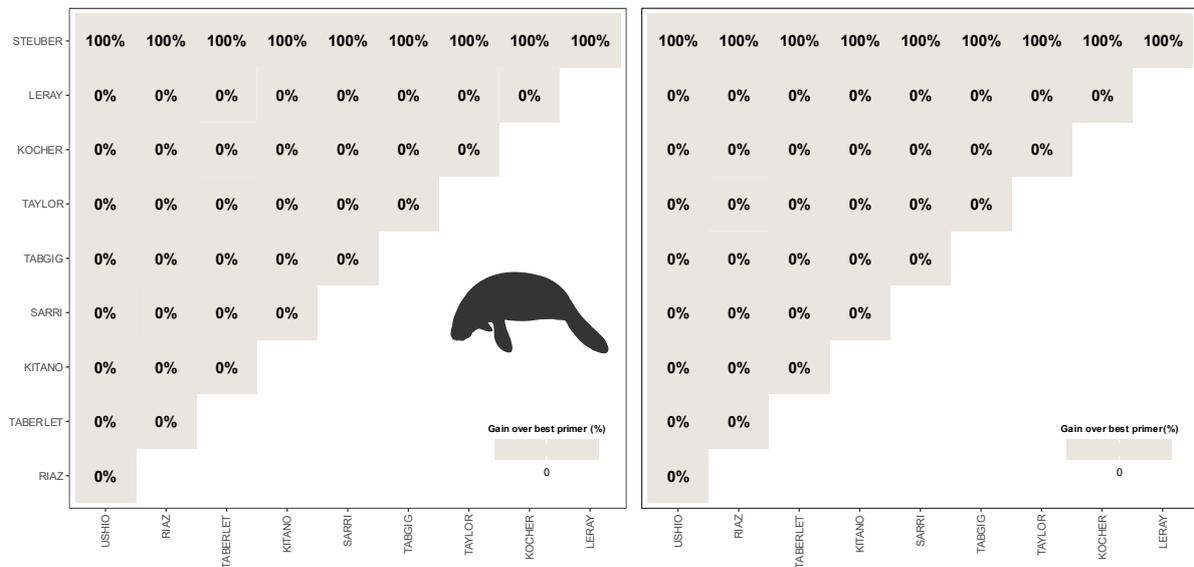


Figure S23: Heatmap showing complementarity in reference-database completeness for Sirenia across different primer combinations. Cell values represent completeness percentages, and the colour scale indicates relative completeness gain compared to the best-performing individual primer within each pair. Left: All sequences. Right: Unambiguous sequences only.

Table SX: Effect of combining barcodes from different loci versus the same locus on median database completeness and gain relative to the best-performing individual primer (\pm IQR).

Comparison type	N pairs	ALL SEQUENCES		UNAMBIGUOUS SEQUENCES	
		Median completeness	Median gain	Median completeness	Median gain
Between-locus	35	51.85 \pm 19.02	6.70 \pm 7.52	48.56 \pm 18.47	7.52 \pm 5.95
Within-locus	10	43.71 \pm 4.14	0.14 \pm 0.14	41.04 \pm 2.50	1.71 \pm 2.22

2. Drivers of database omission – additional plots & tables

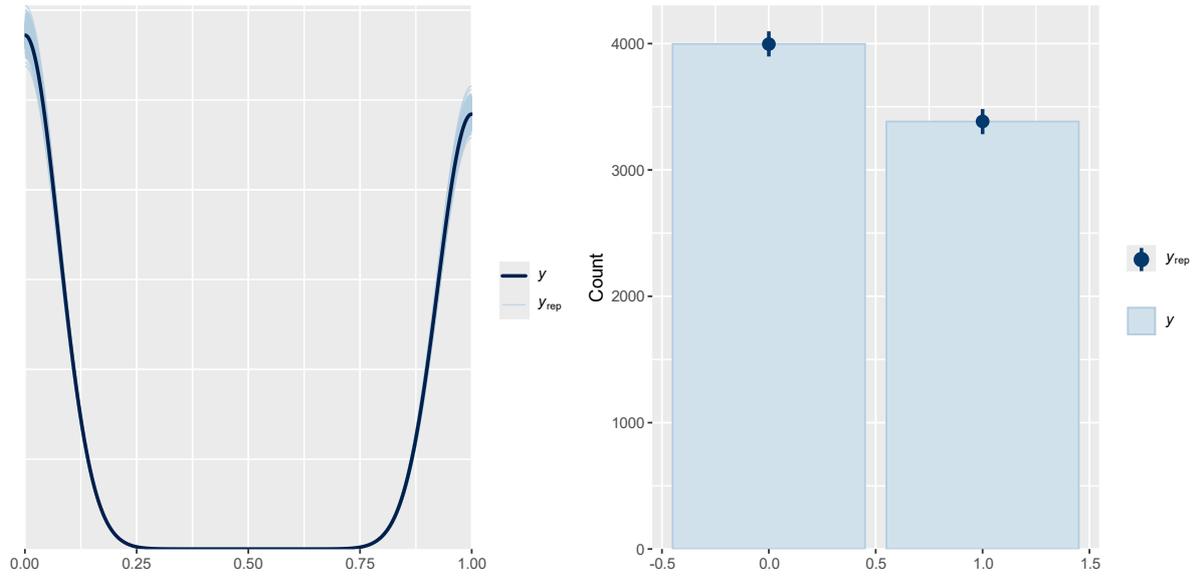


Figure S24. Posterior predictive checks for the null model comparing observed data with simulations from the posterior predictive distribution.

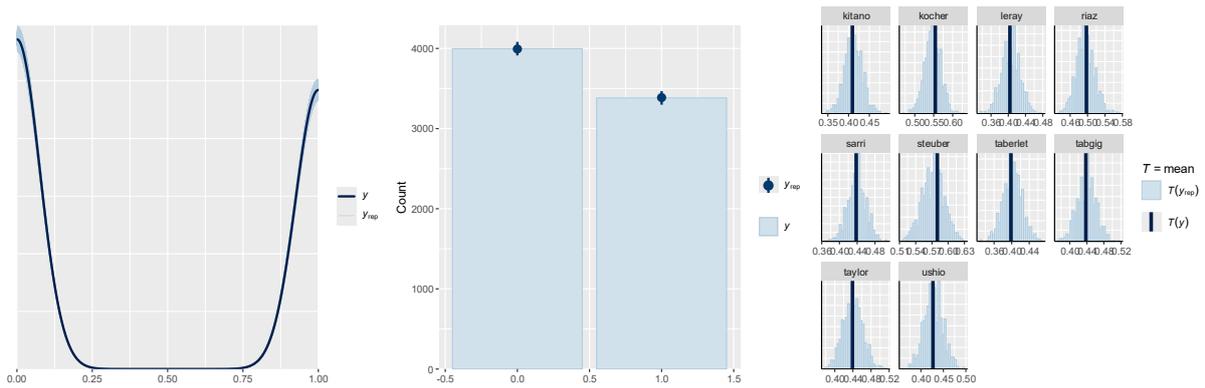


Figure S25. Posterior predictive checks for model 1 – main model (no phylogenetic covariance matrix) comparing observed data with simulations from the posterior predictive distribution.

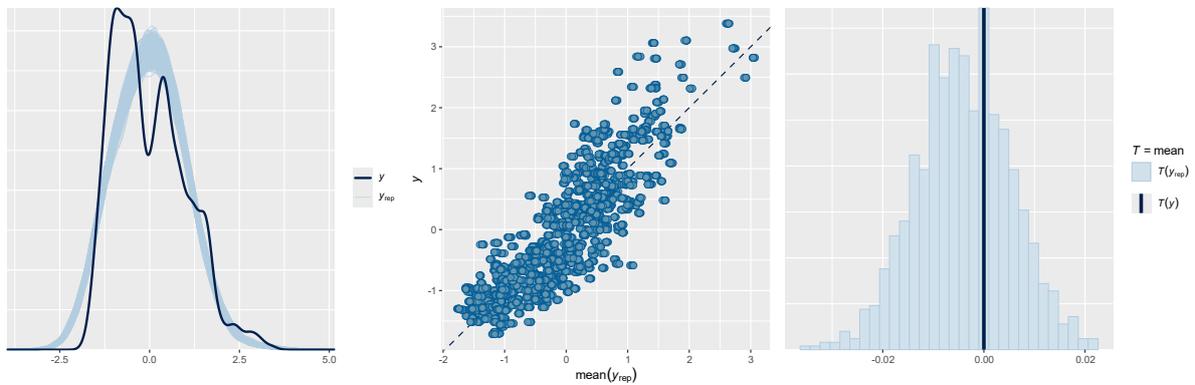


Figure S26. Posterior predictive checks for model 1 – body mass imputation model (no phylogenetic covariance matrix) comparing observed data with simulations from the posterior predictive distribution.

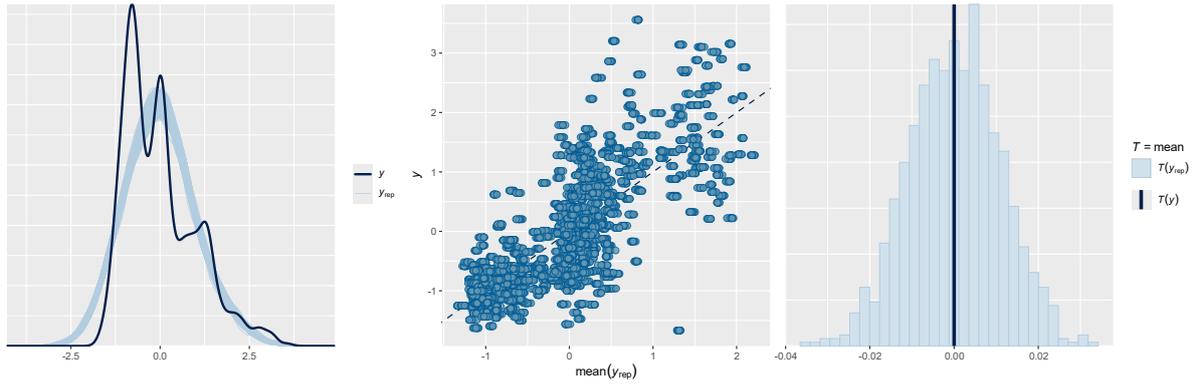


Figure S27. Posterior predictive checks for model 1 – human population in range imputation model (no phylogenetic covariance matrix) comparing observed data with simulations from the posterior predictive distribution.

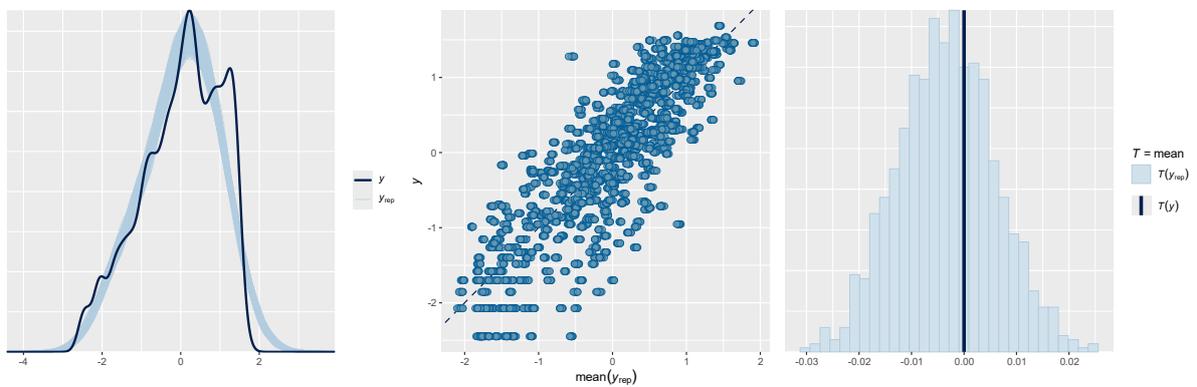


Figure S28. Posterior predictive checks for model 1 – range size imputation model (no phylogenetic covariance matrix) comparing observed data with simulations from the posterior predictive distribution.

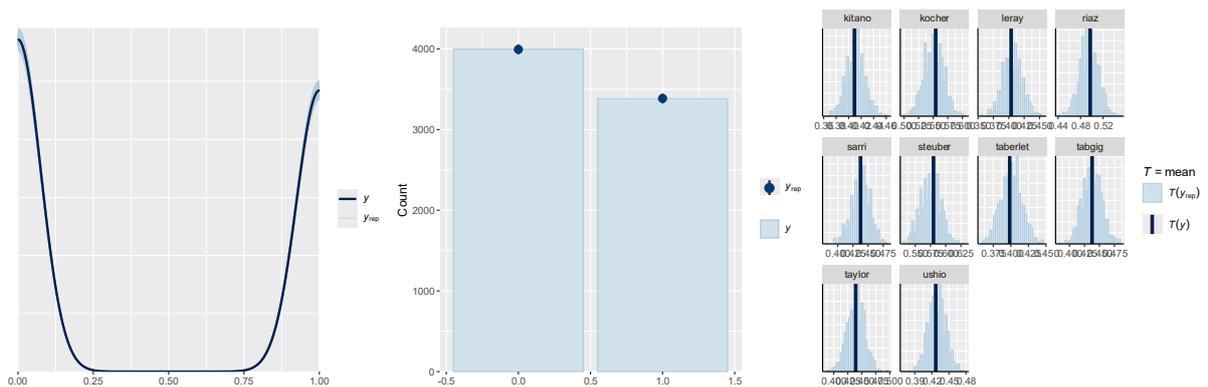


Figure S29. Posterior predictive checks for model 2 (with phylogenetic covariance matrix) comparing observed data with simulations from the posterior predictive distribution. Posterior predictive checks were not visualised for the phylogenetic

random effect (binomial) due to the high number of groups ($n = 731$); however, model diagnostics indicate good convergence and adequate fit.

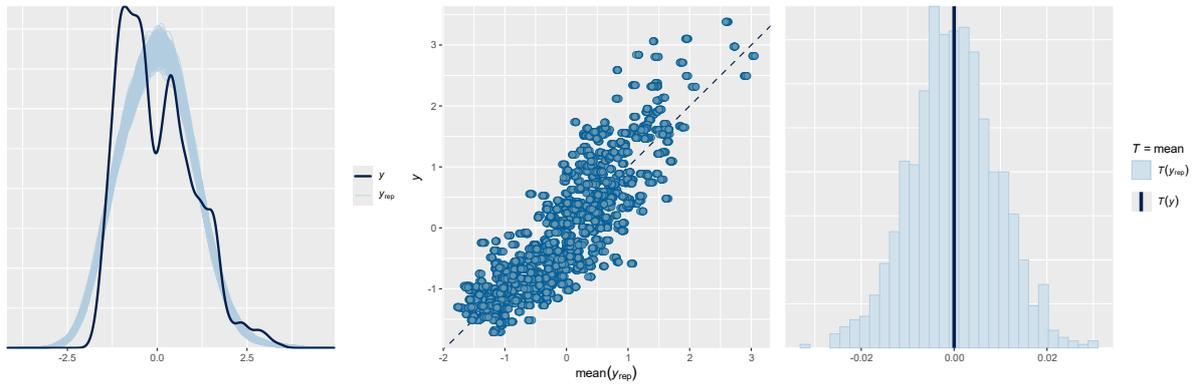


Figure S30. Posterior predictive checks for model 2 – body mass imputation model (with phylogenetic covariance matrix) comparing observed data with simulations from the posterior predictive distribution.

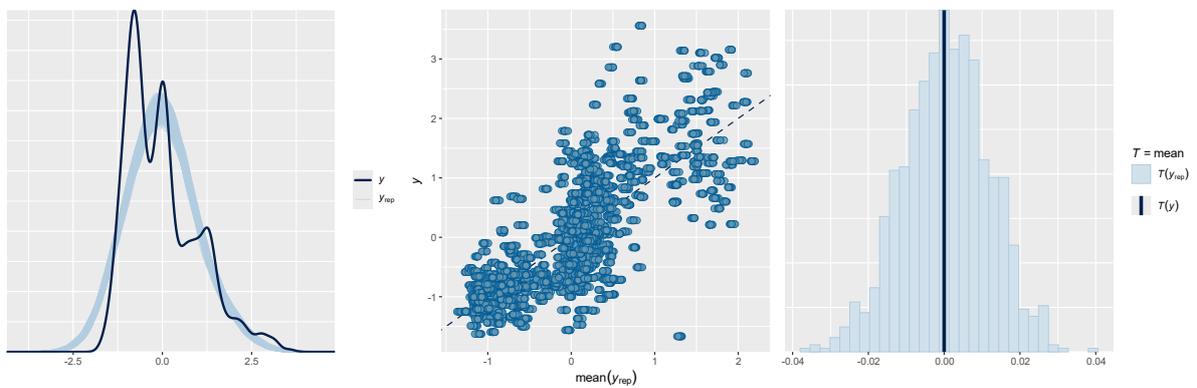


Figure S31. Posterior predictive checks for model 2 – human population in range imputation model (with phylogenetic covariance matrix) comparing observed data with simulations from the posterior predictive distribution.

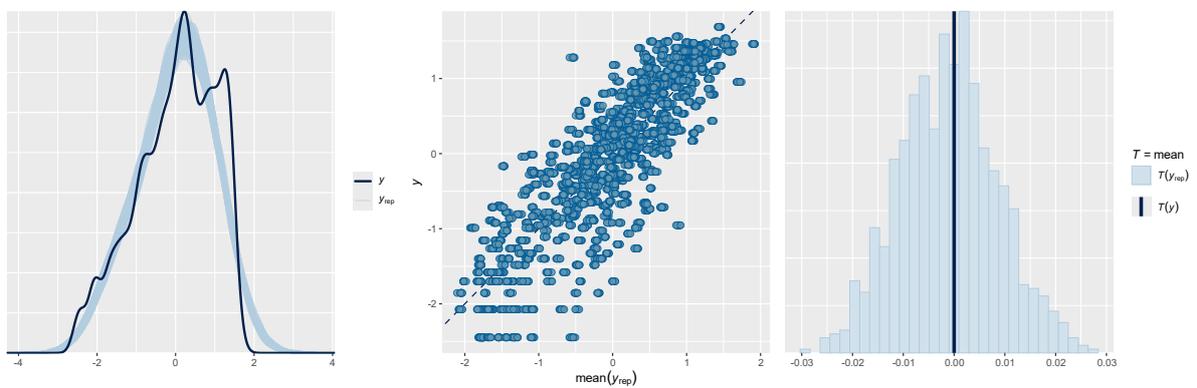


Figure S32. Posterior predictive checks for model 2 – range size imputation model (with phylogenetic covariance matrix) comparing observed data with simulations from the posterior predictive distribution.

Table S2 | Posterior estimates from a Bayesian model of species presence (Model 1): Posterior mean estimates (Estimate), posterior standard deviations (SD), 95% credible intervals (Lower 95% CI / Upper 95% CI), and convergence diagnostics (R-hat) are reported for all model predictors. The ‘*Overlapping 0?*’ column indicates whether the 95% credible interval includes zero, and ‘*Direction*’ summarises the direction of the effect. Random effects summarise variation in the intercept across primers. Continuous predictors are scaled, and categorical predictors are shown relative to their reference levels (indicated in parentheses).

	Estimate	SD	Lower 95% CI	Upper 95% CI	Overlapping 0?	Direction	R-hat
INTERCEPT							
Intercept	-0.756	0.213	-1.175	-0.334	Yes	Negative	1.000
RANDOM EFFECTS							
Primer (sd)	0.388	0.103	0.237	0.631	NA	Positive	1.001
FIXED EFFECTS							
Continuous variables							
Body mass (g)	0.751	0.056	0.640	0.862	Yes	Positive	1.000
Range size (km ²)	0.581	0.057	0.466	0.695	Yes	Positive	1.000
Time since description (years)	0.374	0.043	0.292	0.459	Yes	Positive	1.000
Human population density in range (95 th perc.)	0.027	0.046	-0.064	0.115	No	None	1.000
Categorical variables							
Regional endemism Reference category = “No”							
Cerrado/Caatinga	0.543	0.243	0.062	1.020	Yes	Positive	1.002
Caatinga	0.083	0.250	-0.412	0.569	No	None	1.001
Amazonia	0.058	0.083	-0.105	0.219	No	None	1.000
Pampa	-0.171	0.256	-0.683	0.311	No	None	1.000
Cerrado	-0.271	0.185	-0.637	0.091	No	None	1.000
Atlantic forest	-0.405	0.125	-0.649	-0.165	Yes	Negative	1.000
Pantanal	-0.919	0.285	-1.484	-0.364	Yes	Negative	1.000
National endemism Reference category = “No”							
Unknown	0.430	0.269	-0.101	0.949	No	None	1.000
Yes	-0.141	0.087	-0.314	0.033	No	None	1.001
IUCN Status Reference category = “Least concern”							
Endangered	0.093	0.152	-0.201	0.394	No	None	1.000
Near-threatened	-0.083	0.156	-0.387	0.223	No	None	1.000
Critically endangered	-0.121	0.204	-0.512	0.278	No	None	1.000
Vulnerable	-0.182	0.135	-0.450	0.086	No	None	1.001
Extinct	-0.185	0.466	-1.121	0.703	No	None	1.000
Data deficient	-0.427	0.105	-0.633	-0.221	Yes	Negative	1.000
Unassessed	-0.758	0.091	-0.935	-0.579	Yes	Negative	1.000
Habitat use Reference category = “Terrestrial”							
Volant	1.244	0.169	0.910	1.574	Yes	Positive	1.000
Arboreal	1.059	0.141	0.783	1.338	Yes	Positive	1.000
Fossorial	0.910	0.252	0.407	1.400	Yes	Positive	1.001
Scansorial	0.534	0.124	0.296	0.782	Yes	Positive	1.001
Semi-fossorial	0.234	0.160	-0.080	0.547	No	None	1.000
Semi-aquatic	-0.752	0.190	-1.124	-0.379	Yes	Negative	1.000
Aquatic	-1.130	0.320	-1.754	-0.507	Yes	Negative	1.001
Diet Reference category = 0							
Piscivore	0.770	0.279	0.227	1.331	Yes	Positive	1.001
Granivore	0.572	0.169	0.244	0.897	Yes	Positive	1.001

Frugivore	0.345	0.086	0.177	0.515	Yes	Positive	1.000
Gummivore	0.305	0.214	-0.116	0.731	No	None	1.000
Omnivore	0.222	0.127	-0.027	0.477	No	None	1.001
Carnivore	0.053	0.206	-0.347	0.462	No	None	1.000
Herbivore	-0.035	0.176	-0.383	0.311	No	None	1.000
Insectivore	-0.058	0.092	-0.237	0.119	No	None	1.001
Hemovore	-0.118	0.315	-0.730	0.515	No	None	1.001
Nectarivore	-0.158	0.197	-0.534	0.229	No	None	1.001
Folivore	-0.225	0.125	-0.469	0.016	No	None	1.000
Myrmecivore	-0.704	0.242	-1.179	-0.230	Yes	Negative	1.000
Seminivore	-1.178	0.135	-1.443	-0.914	Yes	Negative	1.001

Table S3 | Posterior estimates from a Bayesian model of species presence (Model 2): Posterior mean estimates (Estimate), posterior standard deviations (SD), 95% credible intervals (Lower 95% CI / Upper 95% CI), and convergence diagnostics (R-hat) are reported for all model predictors. The ‘*Overlapping 0?*’ column indicates whether the 95% credible interval includes zero, and ‘*Direction*’ summarises the direction of the effect. Random effects summarise variation in the intercept across primers and the phylogenetic covariance matrix. Continuous predictors are scaled, and categorical predictors are shown relative to their reference levels (indicated in parentheses).

	Estimate	SD	Lower 95% CI	Upper 95% CI	Overlapping 0?	Direction	R-hat
INTERCEPT							
Intercept	-0.162	1.006	-2.142	1.800	Yes	None	1.001
RANDOM EFFECTS							
Primer (sd)	0.671	0.152	0.440	1.030	No	Positive	1.000
Phylogeny (sd)	5.340	0.206	4.944	5.762	No	Positive	1.000
FIXED EFFECTS							
Continuous variables							
Range size (km ²)	0.907	0.147	0.617	1.192	No	Positive	1.000
Time since description (years)	0.578	0.125	0.336	0.829	No	Positive	1.001
Body mass (g)	0.368	0.202	-0.024	0.766	Yes	None	1.001
Human population density in range (95 th perc.)	-0.012	0.116	-0.233	0.217	Yes	None	1.003
Categorical variables							
Regional endemism Reference category = “No”							
Cerrado/Caatinga	0.177	0.429	-0.680	1.019	Yes	None	1.000
Cerrado	-0.023	0.350	-0.706	0.661	Yes	None	1.001
Caatinga	-0.130	0.423	-0.950	0.686	Yes	None	1.000
Amazonia	-0.142	0.219	-0.568	0.277	Yes	None	1.002
Pampa	-0.252	0.414	-1.078	0.555	Yes	None	1.000
Pantanal	-0.294	0.438	-1.153	0.551	Yes	None	1.000
Atlantic forest	-0.513	0.284	-1.070	0.034	Yes	None	1.002
National endemism Reference category = “No”							
Unknown	0.116	0.451	-0.774	0.998	Yes	None	1.000
Yes	-0.295	0.231	-0.745	0.157	Yes	None	1.002
IUCN Status Reference category = “Least concern”							
Near-threatened	0.268	0.350	-0.417	0.958	Yes	None	1.000
Vulnerable	0.082	0.334	-0.567	0.729	Yes	None	1.001
Endangered	-0.001	0.357	-0.711	0.676	Yes	None	1.000
Extinct	-0.069	0.491	-1.047	0.883	Yes	None	1.000

Critically endangered	-0.324	0.407	-1.129	0.456	Yes	None	1.001
Data deficient	-0.348	0.266	-0.875	0.173	Yes	None	1.001
Unassessed	-0.652	0.244	-1.127	-0.172	No	Negative	1.000
Habitat use Reference category = "Terrestrial"							
Scansorial	0.605	0.329	-0.044	1.240	Yes	None	1.001
Arboreal	0.309	0.354	-0.392	0.998	Yes	None	1.000
Fossorial	0.137	0.465	-0.771	1.041	Yes	None	1.001
Semi-fossorial	0.088	0.385	-0.669	0.833	Yes	None	1.001
Semi-aquatic	0.004	0.381	-0.754	0.741	Yes	None	1.000
Volant	-0.031	0.482	-0.965	0.912	Yes	None	1.000
Aquatic	-0.142	0.490	-1.091	0.817	Yes	None	1.001
Diet Reference category = 0							
Omnivore	0.624	0.323	-0.005	1.264	Yes	None	1.000
Granivore	0.484	0.351	-0.189	1.181	Yes	None	1.000
Frugivore	0.372	0.291	-0.196	0.943	Yes	None	1.000
Piscivore	0.178	0.444	-0.699	1.059	Yes	None	1.001
Gummivore	0.085	0.446	-0.794	0.970	Yes	None	1.000
Insectivore	0.046	0.311	-0.566	0.664	Yes	None	1.000
Folivore	-0.064	0.369	-0.783	0.669	Yes	None	1.000
Carnivore	-0.067	0.440	-0.950	0.799	Yes	None	1.000
Myrmecivore	-0.143	0.468	-1.079	0.773	Yes	None	1.000
Hemovore	-0.152	0.486	-1.099	0.802	Yes	None	1.001
Seminivore	-0.342	0.370	-1.075	0.381	Yes	None	1.001
Nectarivore	-0.380	0.431	-1.209	0.456	Yes	None	1.001
Herbivore	-0.390	0.367	-1.115	0.329	Yes	None	1.000

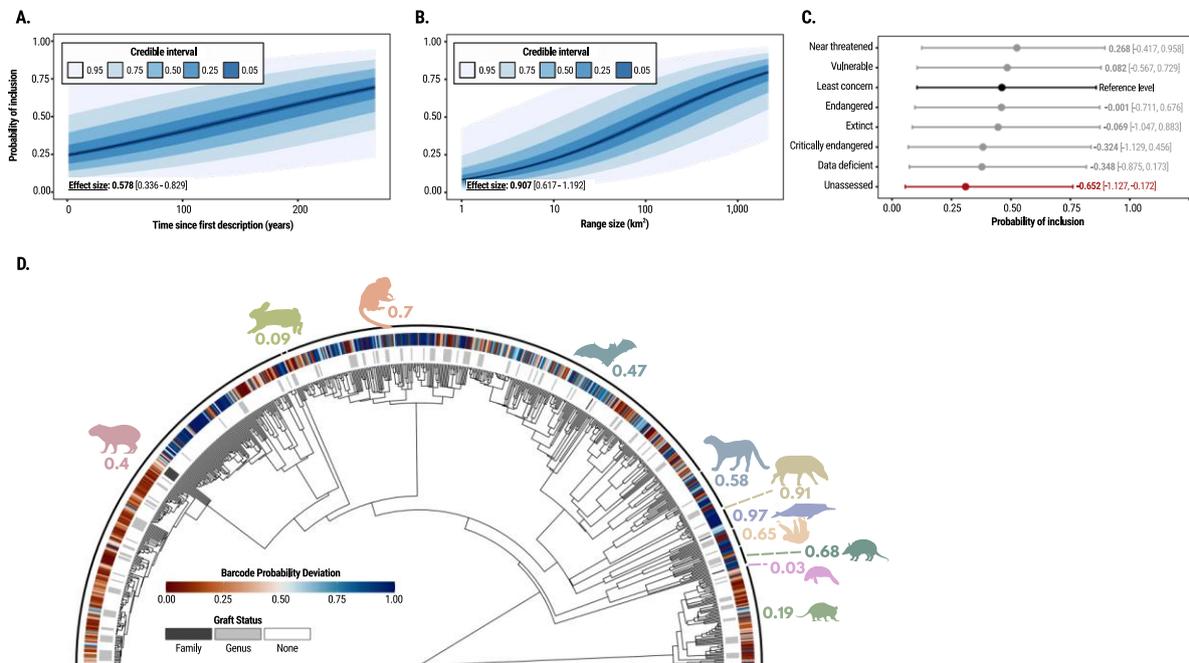


Figure S33 | Marginal effects from Bayesian model 2: Predicted probability of a species being represented in public databases as a function of **A.** time since first scientific description (years), **B.** range size (km², log₁₀ scale), **C.** conservation status, and **D.** phylogenetic random effects. In panel D, the heatmap on the phylogeny represents the predicted deviation in probability of inclusion attributable to species' evolutionary history (back-transformed from the model's latent scale). In panels A-B, lines show

predicted posterior means of probability of inclusion, with shaded bands representing credible intervals. In panel C, points show predicted probabilities for each category, with 95 % credible intervals; text labels indicate effect sizes relative to the reference category, keeping all other variables at reference levels. Colours indicate the direction and certainty of effects: blue = positive with 95 % CIs not overlapping zero, red = negative with 95 % CIs not overlapping zero, grey = 95 % CIs overlapping zero, and black = reference category. Predictors with zero credible effects are not displayed.

GLOBAL

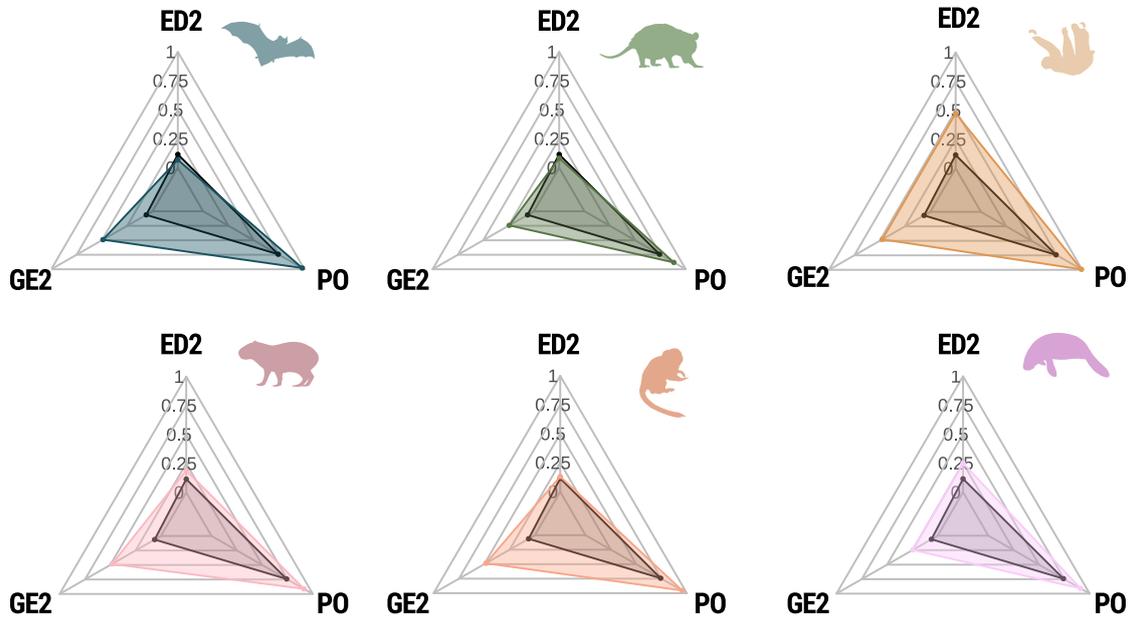


Figure S34: Radar charts showing the median scaled component values contributing to the Barcoding Priority Score (BPS): Evolutionary Distinctiveness (ED), Global Extinction risk (GE), and Probability of Exclusion from reference databases (PE) - for species on the global priority list. Coloured areas represent taxonomic order-specific values for high-priority species (“Highest priority” and “Near priority”), while black outlines represent the overall median values across all Brazilian mammal species, regardless of priority. Values are scaled between 0 and 1 for comparability across components.

BRAZILIAN

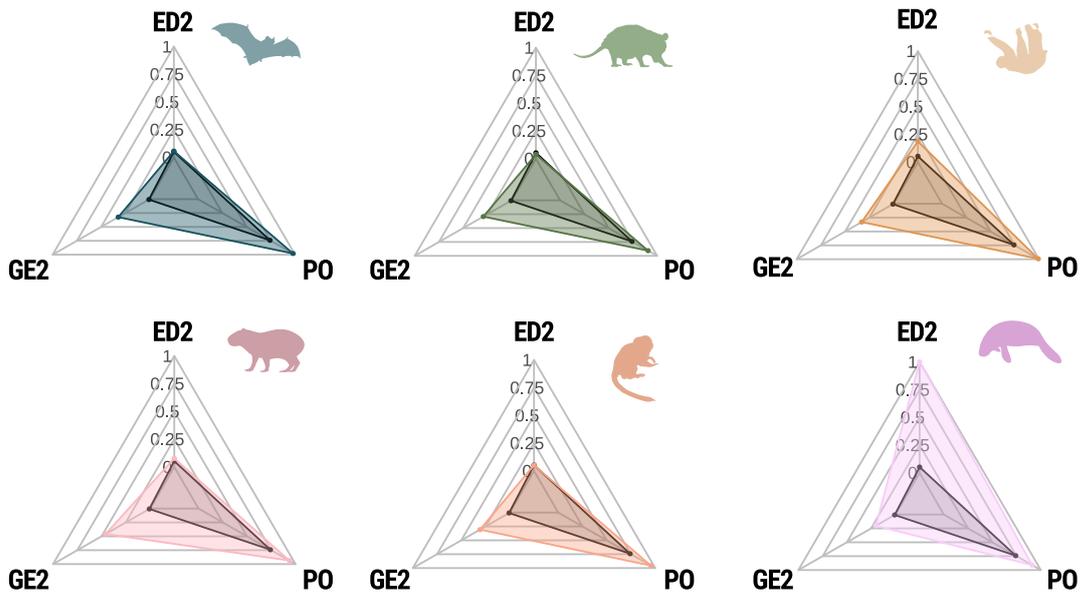


Figure S35: Radar charts showing the median scaled component values contributing to the Barcoding Priority Score (BPS): Evolutionary Distinctiveness (ED), Global Extinction risk (GE), and Probability of Exclusion from reference databases (PE) - for species on the Brazilian priority list. Coloured areas represent taxonomic order-specific values for high-priority species ("Highest priority" and "Near priority"), while black outlines represent the overall median values across all Brazilian mammal species, regardless of priority. Values are scaled between 0 and 1 for comparability across components.

Table S4 | Brazilian mammal species with sequencing priority: Species prioritised based on global and local (Brazilian) schemes, grouped into “Highest priority”, “High priority”, “Research priority”, and “Watch priority”(see Methods), and ordered by the mean rank of their barcoding priority scores (BPS) across both lists.

Order	Binomial name	Common name	IUCN status	Global priority	Global BPS	GE2	Global ED2	Local priority	Local BPS	LE2	Local ED2	PO
HIGHEST PRIORITY SPECIES (N = 35)												
Rodentia	<i>Phyllomys unicolour</i>	Unicoloured Tree Rat	CR	✓	9.729	0.97	12.288	✓	9.68	0.966	12.287	0.848
Pilosa	<i>Bradypus crinitus</i>	Southern Maned Three-Toed Sloth	EN	✓	8.851	0.475	18.999	✓	6.603	0.366	18.999	0.992
Primates	<i>Brachyteles hypoxanthus</i>	Northern Muriqui	CR	✓	7.802	0.964	9.579	✓	5.751	0.98	6.93	0.918
Rodentia	<i>Chaetomys subspinosus</i>	Bristle-Spined Rat	VU	✓	5.688	0.241	25.932	✓	5.82	0.249	25.932	0.908
Rodentia	<i>Phyllomys thomasi</i>	Giant Atlantic Tree Rat	EN	✓	5.341	0.495	11.41	✓	5.355	0.496	11.287	0.936
Primates	<i>Callicebus barbarabrownae</i>	Barbara Brown's Titi	CR	✓	4.014	0.975	4.62	✓	3.91	1	4.485	0.977
Rodentia	<i>Cavia intermedia</i>	Santa Catarina's Guinea Pig	CR	✓	4.001	0.978	4.344	✓	4.416	0.971	4.831	0.995
Rodentia	<i>Ctenomys flamarioni</i>	Flamarion's Tuco-Tuco	EN	✓	2.774	0.492	7.618	✓	6.217	0.479	17.172	0.779
Sirenia	<i>Trichechus inunguis</i>	Amazon Manatee	VU	✓	2.136	0.247	10.039	✓	22.643	0.245	101.35	0.91
Rodentia	<i>Phyllomys brasiliensis</i>	Red-Nosed Tree Rat	EN	✓	3.463	0.484	11.472	✓	3.413	0.484	11.375	0.613
Primates	<i>Callithrix flaviceps</i>	Buffy-Headed Marmoset	CR	✓	4.508	0.974	5.412	✓	2.36	0.491	5.368	0.921
Primates	<i>Callicebus coimbrai</i>	Coimbra's Titi	EN	✓	2.954	0.485	6.425	✓	3.009	0.493	6.446	0.968
Primates	<i>Mico schneideri</i>	Schneider's Marmoset	EN	✓	3.525	0.492	7.077	✓	2.394	0.338	7.077	0.996
Primates	<i>Alouatta puruensis</i>	Purús Red Howler	VU	✓	2.614	0.246	11.706	✓	3.381	0.327	11.706	0.935
Rodentia	<i>Coendou speratus</i>	Dwarf Porcupine	VU	✓	1.892	0.247	7.828	✓	3.796	0.487	7.828	0.967
Rodentia	<i>Phaenomys ferrugineus</i>	Rio de Janeiro Arboreal Rat	EN	✓	2.676	0.476	5.693	✓	2.527	0.43	7.963	0.991
Rodentia	<i>Microakodontomys transitorius</i>	Transitional Colilargo	EN	✓	2.448	0.49	5.219	✓	2.573	0.504	5.311	0.982
Primates	<i>Saimiri vanzolinii</i>	Black Squirrel Monkey	EN	✓	3.191	0.486	7.089	✓	1.599	0.242	7.091	0.987
Primates	<i>Plecturocebus vieirai</i>	Vieira's Titi	CR	✓	8.814	0.96	12.252	✗	0.546	0.058	12.252	0.802
Primates	<i>Leontopithecus chrysomelas</i>	Golden-Headed Lion Tamarin	EN	✓	1.954	0.485	5.098	✓	1.926	0.485	5.098	0.811
Chiroptera	<i>Lonchophylla dekeyseri</i>	Dekeyser's Nectar Bat	EN	✗	1.259	0.496	2.637	✓	2.722	0.482	6.259	0.972
Primates	<i>Cacajao ucayalii</i>	Ucayali Bald-headed Aakari	VU	✓	1.423	0.242	6.229	✗	1.626	0.345	6.229	0.983

Rodentia	<i>Wilfredomys oenax</i>	Red-Nosed Tree Mouse	EN	✓	1.531	0.482	3.273	✓	1.543	0.484	3.272	0.973
Didelphimorphia	<i>Monodelphis unistriata</i>	One-Striped Opossum	CR	✓	1.934	0.969	2.291	✗	1.029	0.347	4.082	0.932
Primates	<i>Chiropotes satanas</i>	Black Saki	EN	✗	1.113	0.483	3.277	✓	2.025	0.986	3.235	0.694
Chiroptera	<i>Lonchophylla bokermanni</i>	Bokermann's Nectar Bat	EN	✓	1.335	0.484	2.905	✓	1.378	0.239	5.68	0.984
Primates	<i>Sapajus robustus</i>	Crested Capuchin	EN	✓	1.362	0.489	3.228	✓	1.361	0.486	3.233	0.955
Rodentia	<i>Ctenomys lami</i>	Lami Tuco-Tuco	VU	✗	0.825	0.249	4.335	✓	1.841	0.494	4.836	0.773
Primates	<i>Mico munduruku</i>	Munduruku Marmoset	VU	✓	1.73	0.246	7.077	✗	0.414	0.061	7.077	0.977
Primates	<i>Chiropotes utahickae</i>	Uta Hick's Saki	VU	✓	1.198	0.24	4.976	✓	1.244	0.246	5.337	0.961
Rodentia	<i>Phyllomys mantiqueirensis</i>	Mantiqueira Atlantic Tree Rat	CR	✓	1.491	0.982	12.456	✗	0.568	0.353	12.444	0.127
Didelphimorphia	<i>Thylamys karimii</i>	Karimi's Fat-tailed Mouse Opossum	VU	✓	1.605	0.244	8.196	✗	0.353	0.062	8.142	0.832
Primates	<i>Callicebus melanochir</i>	Black-Handed Titi	VU	✓	1.078	0.24	4.653	✓	1.085	0.246	4.595	0.968
Primates	<i>Alouatta ululata</i>	Red-Handed Howling Monkey	EN	✗	0.959	0.478	2.315	✓	0.965	0.489	2.312	0.869
Primates	<i>Leontopithecus caissara</i>	Superagüi Lion Tamarin	EN	✓	0.824	0.49	1.756	✓	0.832	0.497	1.771	0.943

HIGH PRIORITY SPECIES

Primates	<i>Brachyteles arachnoides</i>	Southern Muriqui	CR	✓	1.669	0.962	9.583	✗	0.909	0.478	9.816	0.195
Didelphimorphia	<i>Marmosa phaea</i>	Little Woolly Mouse Opossum	VU	✓	0.671	0.243	3.337	✓	0.884	0.316	3.944	0.882
Primates	<i>Mico marcai</i>	Marca's Marmoset	VU	✓	0.601	0.244	2.54	✓	0.308	0.122	2.518	0.996
Primates	<i>Mico rondoni</i>	Rondon's Marmoset	VU	✓	0.569	0.238	2.485	✓	0.539	0.241	2.407	0.951
Rodentia	<i>Rhagomys rufescens</i>	Brazilian Arboreal Mouse	VU	✓	0.61	0.243	2.818	✗	0.159	0.063	3.467	0.911

RESEARCH PRIORITY SPECIES

Rodentia	<i>Gyldenstolpia planaltensis</i>	Cerrado Giant Rat	UA	✓	9.6	0.405	24.49	✓	11.332	0.477	24.49	0.984
Chiroptera	<i>Myotis pampa</i>	/	UA	✓	9.41	0.335	29.938	✓	9.255	0.335	29.938	0.985
Rodentia	<i>Ctenomys bicolour</i>	Bicoloured Tuco-Tuco	UA	✓	7.659	0.402	20.909	✓	9.228	0.478	20.909	0.958
Rodentia	<i>Ctenomys rondoni</i>	Rondon's Tuco-Tuco	UA	✓	6.713	0.343	20.909	✓	7.606	0.388	20.909	0.987
Didelphimorphia	<i>Monodelphis pinocchio</i>	Reig's Opossum	UA	✓	5.656	0.384	16.843	✓	5.862	0.396	16.843	0.972
Didelphimorphia	<i>Monodelphis vossi</i>	Voss's Short-Tailed Opossum	UA	✓	5.361	0.353	16.843	✓	5.841	0.368	16.843	0.992

Didelphimorphia	<i>Marmosops woodalli</i>	Woodall's Slender Opossum	UA	✓	4.868	0.334	15.589	✓	5.27	0.349	15.589	0.986
Didelphimorphia	<i>Marmosops marina</i>	Silva's Slender Opossum	UA	✓	4.819	0.322	15.589	✓	5.218	0.353	15.589	0.973
Rodentia	<i>Bucepattersonius nebulosus</i>	Nebulous Bruceie	UA	✓	8.48	0.362	24.49	✓	2.888	0.124	24.49	0.979
Rodentia	<i>Calassomys apicalis</i>	Calaca's White-Tailed Mouse	UA	✓	8.76	0.378	24.49	✓	2.833	0.119	24.49	0.985
Chiroptera	<i>Dryadonycteris capixaba</i>	Capixaba Nectarfeeding Bat	DD	✓	12.885	0.369	35	✓	2.103	0.06	35	0.998
Rodentia	<i>Bucepattersonius griserufescens</i>	Gray-Bellied Bruceie	DD	✓	8.702	0.369	24.49	✓	2.809	0.121	24.49	0.97
Chiroptera	<i>Lonchophylla inexpectata</i>	/	UA	✓	4.5	0.355	13.224	✓	4.527	0.376	13.224	0.994
Rodentia	<i>Phyllomys centralis</i>	Central Brazilian Spiny Tree Rat	UA	✓	4.366	0.367	13.692	✓	4.469	0.372	13.692	0.863
Chiroptera	<i>Myotis izecksohni</i>	Izecksohn's Myotis	DD	✓	10.115	0.351	29.938	✓	1.602	0.059	29.938	0.992
Primates	<i>Saguinus kulina</i>	Kulinas' Mustached Tamarin	UA	✓	4.539	0.389	12.538	✓	4.23	0.345	12.538	0.997
Didelphimorphia	<i>Marmosa rapposa</i>	Bolivian Woolly Mouse Opossum	UA	✓	4.233	0.342	14.865	✓	4.444	0.368	14.865	0.94
Chiroptera	<i>Molossus fluminensis</i>	Southern Black Mastiff Bat	UA	✓	4.188	0.33	16.353	✓	4.498	0.377	16.353	0.866
Rodentia	<i>Makalata obscura</i>	Dusky Spiny Tree Rat	DD	✓	4.503	0.373	13.485	✓	4.054	0.33	13.485	0.906
Primates	<i>Saguinus subgriseus</i>	Bearded Emperor Tamarin	UA	✓	4.322	0.368	12.538	✓	4.248	0.348	12.538	0.989
Rodentia	<i>Trinomys mirapitanga</i>	Dark-caped Atlantic Spiny Rat	DD	✓	3.901	0.348	12.199	✓	5.551	0.491	12.189	0.887
Rodentia	<i>Bucepattersonius soricinus</i>	Soricine Bruceie	DD	✓	8.215	0.362	24.49	✓	1.453	0.064	24.49	0.956
Primates	<i>Saguinus pileatus</i>	Red-Capped Tamarin	UA	✓	4.049	0.338	12.538	✓	4.209	0.353	12.538	0.987
Pilosa	<i>Cyclopes thomasi</i>	Thomas's Silky Anteater	DD	✓	6.835	0.357	19.325	✓	1.173	0.061	19.326	0.992
Pilosa	<i>Cyclopes ida</i>	Rio Negro Silky Anteater	DD	✓	6.549	0.346	19.325	✓	1.111	0.059	19.326	0.98
Chiroptera	<i>Eumops chimaera</i>	Chimers Bonneted Bat	UA	✓	5.988	0.351	18.695	✓	0.997	0.06	18.695	0.997
Chiroptera	<i>Lasiurus villosissimus</i>	Southern Hoary Bat	UA	✓	3.75	0.363	11.901	✓	3.176	0.311	11.901	0.966
Primates	<i>Pithecia cazuzai</i>	Cazuza's Saki	DD	✓	3.688	0.357	11.89	✓	3.629	0.362	11.89	0.985
Cingulata	<i>Dasypus guianensis</i>	Guianan Long-nosed Armadillo	UA	✓	3.584	0.351	10.205	✓	3.783	0.371	10.205	0.993
Rodentia	<i>Rhipidomys tribei</i>	Tribe's Climbing Mouse	DD	✓	3.116	0.362	8.732	✓	4.323	0.468	8.732	0.994
Chiroptera	<i>Eumops delticus</i>	Delta Bonneted Bat	DD	✓	5.668	0.332	18.695	✓	0.977	0.061	18.695	0.983
Rodentia	<i>Rhipidomys baturiteensis</i>	Cariri Climbing Rat	UA	✓	3.492	0.405	8.732	✓	3.162	0.376	8.732	0.995
Rodentia	<i>Rhipidomys caracolensis</i>	Caracol Climbing Rat	UA	✓	3.22	0.369	8.732	✓	2.985	0.35	8.732	0.993
Rodentia	<i>Thrichomys fosteri</i>	Foster's Punare	UA	✓	5.547	0.352	16.346	✗	0.907	0.058	16.346	0.961
Didelphimorphia	<i>Monodelphis saci</i>	Reig's Opossum	UA	✓	4.909	0.322	16.843	✓	0.936	0.06	16.843	0.998
Rodentia	<i>Ctenomys nattereri</i>	Natterer's Tuco-Tuco	UA	✓	5.39	0.368	20.909	✗	0.904	0.063	20.909	0.736

Rodentia	<i>Rhipidomys bezerrensis</i>	Bezerros Climbing Rat	UA	✓	3.088	0.347	8.732	✓	2.963	0.347	8.732	0.997
Rodentia	<i>Rhipidomys ybyrae</i>	Ybyra Climbing Rat	UA	✓	2.98	0.336	8.732	✓	2.965	0.341	8.732	0.994
Primates	<i>Aotus infulatus</i>	Feline Night Monkey	UA	✓	4.62	0.352	15.409	✗	0.802	0.062	15.409	0.948
Primates	<i>Saguinus ursula</i>	Eastern Black-Handed Tamarin	UA	✓	3.836	0.37	12.538	✓	1.244	0.121	12.538	0.83
Rodentia	<i>Echimyus vieirai</i>	Vieira's Tree-Rat	DD	✓	4.681	0.388	12.204	✗	0.738	0.062	12.422	0.952
Rodentia	<i>Thrichomys laurentius</i>	Sao Lourenco Punare	DD	✓	4.547	0.365	13.088	✗	0.751	0.06	13.087	0.936
Didelphimorphia	<i>Metachirus arinatai</i>	/	UA	✓	2.65	0.299	9.241	✓	3.117	0.359	9.174	0.992
Chiroptera	<i>Sturnira giannae</i>	Gianna's Yellow-shouldered Bat	UA	✓	2.922	0.354	10.211	✓	2.867	0.334	10.211	0.939
Rodentia	<i>Rhipidomys cearanus</i>	/	UA	✓	2.819	0.324	8.732	✓	2.95	0.344	8.732	0.989
Rodentia	<i>Oxymycterus itapeby</i>	Itapevi Hociucudo	UA	✓	2.743	0.345	9.015	✓	2.732	0.34	9.015	0.978
Rodentia	<i>Phyllomys kerri</i>	Kerr's Atlantic Tree-Rat	DD	✗	3.216	0.344	11.344	✓	1.125	0.123	11.295	0.796
Chiroptera	<i>Pteronotus alitonus</i>	Amazonian Mustached Bat	UA	✓	4.068	0.336	14.268	✗	0.741	0.061	14.268	0.853
Didelphimorphia	<i>Marmosa waterhousei</i>	Waterhouse's Mouse Opossum	UA	✓	4.15	0.338	14.865	✗	0.729	0.06	14.865	0.983
Didelphimorphia	<i>Monodelphis arlindoi</i>	Arlindo's Short-Tailed Opossum	UA	✓	4.208	0.375	16.843	✗	0.631	0.057	16.843	0.714
Rodentia	<i>Kerodon acrobata</i>	Climbing Cavy	DD	✓	2.684	0.37	7.452	✓	2.017	0.239	8.456	0.989
Didelphimorphia	<i>Marmosa rutteri</i>	Thomas' Mouse Opossum	UA	✓	4.011	0.34	14.865	✗	0.712	0.061	14.865	0.931
Lagomorpha	<i>Sylvilagus paraguensis</i>	Paraguayan Tapetí	UA	✓	2.194	0.358	6.754	✓	2.392	0.385	6.951	0.994
Rodentia	<i>Calomys cerqueirai</i>	Cerqueira's Vesper Mouse	UA	✓	2.255	0.383	6.669	✓	2.075	0.342	6.669	0.998
Rodentia	<i>Akodon diauarum</i>	Diauarum Grass Mouse	UA	✓	2.136	0.381	6.199	✓	2.043	0.372	6.199	0.989
Primates	<i>Saguinus cruzlimai</i>	Cruz Lima's Saddle-Back Tamarin	UA	✓	3.642	0.346	12.538	✗	0.675	0.063	12.538	0.902
Rodentia	<i>Akodon kadiweu</i>	Kadiwéu Grass Mouse	UA	✓	1.99	0.355	6.199	✓	2.053	0.382	6.199	0.972
Carnivora	<i>Mustela africana</i>	Amazon Weasel	UA	✓	3.089	0.315	10.826	✗	0.864	0.057	16.725	0.905
Chiroptera	<i>Neoplatymops mattogrossensis</i>	Mato Grosso Dog-Faced Bat	UA	✓	3.832	0.371	12.464	✗	0.544	0.062	11.295	0.967
Rodentia	<i>Neacomys marajoara</i>	/	UA	✗	1.638	0.382	4.71	✓	1.499	0.343	4.71	0.988
Cingulata	<i>Dasybus beniensis</i>	East Amazonian Long-nosed Armadillo	UA	✓	3.158	0.335	10.205	✗	0.587	0.064	10.205	0.934
Artiodactyla	<i>Inia araguaiaensis</i>	Araguaian River Dolphin	UA	✗	1.152	0.325	4.837	✓	1.344	0.248	6.675	0.82
Cingulata	<i>Dasybus pastasae</i>	Western Greater Long-nosed Armadillo	UA	✓	3.132	0.339	10.205	✗	0.522	0.061	10.205	0.862
Rodentia	<i>Cerradomys goytaca</i>	Goytaca Rice Rat	UA	✗	0.714	0.341	2.805	✓	1.219	0.494	2.805	0.967
Rodentia	<i>Phyllomys lamarum</i>	Pallid Atlantic Tree Rat	DD	✓	3.02	0.346	11.519	✗	0.559	0.065	11.479	0.74

Lagomorpha	<i>Sylvilagus tapetillus</i>	Dwarf Tapetí	UA	✓	2.047	0.332	6.754	✓	0.901	0.122	7.571	0.987
Didelphimorphia	<i>Metachirus myosuros</i>	Brown Four-Eyed Opossum	UA	✓	3.059	0.39	9.221	✗	0.455	0.059	9.378	0.883
Rodentia	<i>Oligoryzomys rupestris</i>	Highlands Colilargo	DD	✗	0.197	0.318	0.946	✓	0.995	0.466	2.562	0.832
Rodentia	<i>Rhipidomys cariri</i>	Cariri Climbing Rat	DD	✗	0.86	0.393	2.726	✓	0.926	0.236	4.009	0.968
Rodentia	<i>Rhipidomys ipukensis</i>	Ipuca Climbing Rat	DD	✓	2.846	0.339	8.732	✗	0.487	0.06	8.732	0.973
Rodentia	<i>Coendou longicaudatus</i>	Brazilian Porcupine	UA	✓	2.884	0.378	7.828	✗	0.453	0.059	7.828	0.964
Didelphimorphia	<i>Gracilinanus peruanus</i>	Emilia's Opossum	UA	✓	2.619	0.352	8.15	✗	0.426	0.06	8.15	0.936
Rodentia	<i>Neacomys oliveirai</i>	João Oliveira's Spiny Mouse	UA	✗	1.522	0.348	4.71	✓	0.579	0.121	4.71	0.985
Rodentia	<i>Calomys mattevii</i>	Mattevi's Vesper Mouse	UA	✓	2.437	0.403	6.669	✗	0.361	0.061	6.669	0.994
Lagomorpha	<i>Sylvilagus minensis</i>	Minensis Tapetí	UA	✓	2.097	0.353	6.754	✗	0.448	0.061	8.217	0.978
Rodentia	<i>Delomys altimontanus</i>	Montane Atlantic Forest Rat	UA	✗	1.257	0.364	3.975	✓	0.478	0.121	3.975	0.979
Chiroptera	<i>Cynomops mastivus</i>	Cinnamon Dog-Faced Bat	UA	✓	2.01	0.338	6.855	✗	0.338	0.06	6.855	0.986

WATCH PRIORITY

Rodentia	<i>Ctenomys ibicuiensis</i>	Ibicuí Tuco-Tuco	NT	✓	2.046	0.12	20.909	✓	2.012	0.118	20.909	0.836
Pilosa	<i>Cyclopes rufus</i>	Red Silky Anteater	LC	✓	1.167	0.061	19.325	✓	7.102	0.37	19.325	0.992
Chiroptera	<i>Myotis lavalii</i>	Laval's Myotis	LC	✓	1.615	0.06	29.938	✓	1.669	0.062	29.938	0.985
Primates	<i>Pithecia inusta</i>	Burnished Saki	LC	✗	0.594	0.062	11.89	✓	3.4	0.343	11.89	0.908
Rodentia	<i>Drymoreomys albimaculatus</i>	White-Throated Montane Forest Rat	NT	✓	2.788	0.12	24.49	✓	1.294	0.057	24.49	0.97
Didelphimorphia	<i>Hyladelphys kalinowskii</i>	Kalinowski's Mouse Opossum	LC	✗	1.391	0.056	28.449	✓	1.522	0.062	28.449	0.919
Cingulata	<i>Cabassous squamicaudis</i>	Cerrado Naked-tailed Armadillo	LC	✗	0.524	0.058	9.48	✓	3.125	0.343	9.504	0.98
Rodentia	<i>Galea flavidens</i>	Brazilian Yellow-Toothed Cavy	LC	✗	0.313	0.058	7.101	✓	3.282	0.356	10.487	0.982
Rodentia	<i>Brucepattersonius iheringi</i>	Ihering's Brucie	LC	✗	1.234	0.06	24.49	✓	1.221	0.059	24.49	0.879
Pilosa	<i>Cyclopes xinguensis</i>	Xingu Silky Anteater	LC	✓	1.174	0.061	19.325	✓	1.187	0.062	19.326	0.993
Rodentia	<i>Calomys hummelincki</i>	Hummelinck's Vesper Mouse	LC	✗	0.24	0.058	4.984	✓	1.838	0.408	5.211	0.983
Rodentia	<i>Kerodon rupestris</i>	Rock Cavy	LC	✗	0.362	0.062	9.293	✓	1.321	0.242	8.457	0.65
Rodentia	<i>Thalpomys lasiotis</i>	Hairy-eared Cerrado Mouse	LC	✗	0.17	0.063	3.617	✓	1.901	0.499	4.379	0.92
Didelphimorphia	<i>Thylamys velutinus</i>	Dwarf Fat-tailed Mouse Opossum	NT	✓	0.828	0.122	7.341	✗	0.353	0.061	7.201	0.923
Rodentia	<i>Cavia magna</i>	Greater Guinea Pig	LC	✗	0.353	0.061	7.788	✓	0.707	0.122	7.77	0.755

Rodentia	<i>Thalpomys cerradensis</i>	Cerrado Mouse	LC	X	0.166	0.062	3.62	✓	1.133	0.235	5.174	0.932
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