

SUPPLEMENTARY MATERIAL

Supplementary material 2 article: Variation in the population density of the Giant African Snail (*Lissachatina fulica*) in the Neotropical region

Material suplementario 2 artículo: Variación de la densidad poblacional del caracol gigante africano (*Lissachatina fulica*) en la región Neotropical

Citación: Patiño-Montoya A, Giraldo A, Tidon R. 2022. Variation in the population density of the Giant African Snail (*Lissachatina fulica*) in the Neotropical region. *Caldasia* 44(3):627–635. doi: <https://doi.org/10.15446/caldasia.v44n3.96508>

Table S2. Principal component Analysis (PCA) of the climate variables and human footprint in neotropical localities recording *Lissachatina fulica* density.

	Eigenvalue	Variance percent	Cumulative variance percent
PC1	7.39	36.97	36.97
PC2	5.31	26.53	63.50
PC3	3.06	15.30	78.80
PC4	1.90	9.49	88.28
PC5	0.81	4.04	92.33
PC6	0.78	3.90	96.22
PC7	0.50	2.51	98.74
PC8	0.15	0.74	99.47
PC9	0.05	0.25	99.73
PC10	0.02	0.10	99.83
PC11	0.01	0.06	99.89
PC12	0.01	0.05	99.93
PC13	0.00	0.02	99.96
PC14	0.00	0.02	99.98
PC15	0.00	0.01	99.99
PC16	0.00	0.01	100.00
PC17	0.00	0.00	100.00
PC18	0.00	0.00	100.00
PC19	0.00	0.00	100.00
PC20	0.00	0.00	100.00

Table S3. Contributions of Human Footprint (HFP) and climate variable for each principal component.

	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
HFP	0.000	0.002	8.489	3.922	70.307	5.749	10.048	1.042	0.173	0.006
bio1	12.594	0.075	1.869	0.055	0.086	0.568	0.025	0.029	0.687	0.395
bio10	9.166	0.021	10.183	0.025	0.549	0.273	0.214	0.312	0.448	1.128
bio11	13.274	0.122	0.031	0.022	0.000	0.687	0.329	0.768	2.892	2.737
bio12	0.082	17.851	0.067	0.062	0.130	3.826	0.215	0.174	15.044	0.067
bio13	0.188	15.707	0.056	2.292	0.885	10.842	0.005	6.126	4.585	4.818
bio14	1.376	12.036	0.150	4.215	0.016	14.948	6.545	13.526	8.016	1.733
bio15	2.597	2.246	0.084	22.339	0.543	12.457	21.283	36.467	0.098	0.557
bio16	0.007	15.519	0.254	3.333	0.603	11.642	0.243	1.473	7.879	3.056
bio17	0.909	13.957	0.007	4.974	0.010	8.679	2.847	7.117	2.532	0.105
bio18	3.068	6.220	3.253	7.823	2.896	4.248	22.409	11.836	9.838	11.634
bio19	1.172	11.612	1.530	5.044	0.534	7.199	12.699	12.377	12.980	26.223
bio2	0.457	1.713	1.246	31.631	10.593	9.592	14.516	1.819	0.293	0.184
bio3	4.031	0.218	19.359	2.727	0.219	0.253	6.007	0.381	13.993	15.321
bio4	3.896	0.168	21.552	0.000	1.309	0.460	2.258	4.904	10.994	22.258
bio5	9.600	0.024	7.550	2.054	1.956	0.008	0.010	0.044	1.625	0.000
bio6	12.764	0.498	0.006	0.419	0.307	1.994	0.130	0.014	3.076	0.591
bio7	2.611	1.808	14.466	8.780	7.660	4.659	0.197	0.221	1.262	1.577
bio8	9.033	0.081	9.750	0.230	0.860	1.216	0.010	1.306	0.003	4.975
bio9	13.175	0.123	0.097	0.054	0.537	0.698	0.011	0.065	3.583	2.634

Table S4. Neotropical localities score of each principal components.

	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
1	-3.959	-0.785	3.032	3.634	1.567	0.550	0.032	0.153	-0.004	Caldasia 44(3) 0.010
2	-3.281	-2.415	4.155	1.621	0.624	1.001	-0.048	0.369	0.308	0.293
3	-2.806	0.595	1.767	-1.099	0.269	-0.137	-0.072	-0.295	-0.154	-0.133
4	-1.276	-1.527	1.939	-0.356	0.372	-0.363	-0.187	-0.138	-0.111	-0.196
5	2.575	1.632	-1.102	-1.702	1.143	0.330	-2.192	0.748	-0.046	0.035
6	0.411	-0.436	0.083	-1.388	-2.146	-1.440	-1.353	0.487	0.017	0.285
7	-3.641	1.011	2.201	-1.725	0.046	-0.352	-0.466	0.023	0.084	-0.162
8	1.154	-0.155	0.426	-0.103	0.394	0.860	0.204	-0.299	-0.768	0.148
9	-3.522	1.082	1.834	-1.934	1.059	-0.764	-0.852	0.146	0.056	-0.101
10	-2.925	2.269	2.664	-1.446	-1.786	-0.185	0.387	-0.544	-0.104	-0.110
11	2.898	-0.230	0.284	0.988	-0.200	0.397	0.014	0.081	0.083	-0.045
12	2.082	-0.258	-0.388	0.825	0.127	-0.526	0.199	-0.337	0.115	-0.058
13	1.856	-0.725	-0.660	0.851	0.322	-0.784	0.050	-0.138	0.051	0.120
14	2.938	-0.241	0.369	1.052	-0.364	0.571	0.107	0.077	0.103	-0.025
15	2.231	0.594	-0.081	0.448	-0.955	0.335	0.372	-0.130	0.330	-0.078
16	1.907	-0.429	-0.597	0.867	0.478	-0.748	0.119	-0.269	0.077	-0.003
17	1.431	2.146	-0.881	0.146	0.491	-0.129	-0.363	-0.099	0.390	-0.087
18	2.478	-0.349	-0.659	0.655	1.077	-0.617	-0.216	0.020	-0.031	-0.116
19	2.772	0.209	0.102	1.099	-0.114	-0.085	0.051	-0.092	0.063	-0.079
20	1.950	0.946	-0.697	0.273	0.634	-0.393	-0.232	-0.170	0.270	-0.078
21	-0.867	0.729	-1.621	0.992	-0.819	-0.436	0.070	0.000	0.174	0.087
22	-6.213	-2.818	-3.843	0.404	-1.341	0.609	0.327	-0.164	0.069	-0.103
23	1.496	0.204	-1.033	0.675	0.310	-0.357	0.106	-0.152	0.184	-0.080
24	-5.044	-2.447	-3.548	0.040	-0.423	0.432	-0.569	0.152	0.135	-0.036
25	1.092	5.718	-0.505	0.377	-0.896	3.693	-0.671	-0.215	-0.050	0.054
26	1.798	-2.617	-0.083	0.900	-0.433	-0.735	0.223	-0.157	-0.094	0.308
27	2.668	-1.803	0.205	-0.976	-0.509	0.378	0.091	0.424	-0.162	-0.129
28	2.129	-2.064	0.163	0.502	-0.264	-0.103	0.094	-0.044	-0.397	-0.096
29	1.831	-1.771	0.068	0.021	-0.335	-0.109	0.235	-0.151	-0.179	-0.242
30	2.144	-1.717	-0.197	-0.245	0.086	-0.228	-0.200	0.103	-0.366	0.046
31	0.558	2.564	-0.441	-3.262	1.428	-0.214	0.857	-1.057	0.187	0.305
32	1.491	-2.226	-0.224	-3.342	0.621	1.174	2.379	1.093	0.180	-0.005
33	-3.085	8.628	-1.350	1.886	-0.096	-1.640	1.342	0.832	-0.291	0.037
34	-4.914	-2.082	-3.830	-0.338	1.390	0.307	-0.107	-0.210	-0.210	0.112
35	-0.357	-1.231	2.449	-0.341	-1.756	-0.290	0.270	-0.048	0.092	0.119

Table S5. Correlations between Human Footprint (HFP) and climate variables with each principal component.

	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
HFP	-0.0039	0.01058	0.5096	0.2728	-0.754	0.2117	0.2248	-0.039	0.0094	0.0011
bio1	0.96493	0.06289	0.2392	0.0324	0.0263	-0.067	0.0112	-0.007	-0.019	0.0088
bio10	0.82321	0.03352	0.5582	0.0219	0.0667	-0.046	-0.033	0.0214	0.0151	0.0149
bio11	0.99067	0.08035	-0.0307	0.0202	-7E-04	-0.073	0.0407	-0.034	-0.038	-0.0232
bio12	-0.078	0.97323	0.0452	0.0342	0.0325	0.1727	-0.033	-0.016	-0.087	0.0036
bio13	0.11793	0.91293	0.0415	-0.209	0.0846	0.2907	-0.005	-0.095	0.0482	0.0307
bio14	-0.3189	0.79916	0.0678	0.2828	0.0112	-0.341	0.1814	0.1412	-0.064	0.0184
bio15	0.43816	-0.3452	-0.0506	-0.651	0.0663	0.3116	0.3271	0.2319	-0.007	-0.0104
bio16	0.02293	0.90746	0.0881	-0.251	0.0699	0.3012	-0.035	-0.047	-0.063	0.0245
bio17	-0.2593	0.86058	0.015	0.3072	-0.009	-0.26	0.1196	0.1024	0.0358	0.0045
bio18	-0.4762	0.57451	0.3155	-0.385	0.1531	-0.182	0.3357	-0.132	0.0707	-0.0477
bio19	0.29435	0.78495	-0.2164	0.3094	-0.066	0.2369	-0.253	0.1351	0.0812	-0.0717
bio2	0.18388	-0.3015	-0.1952	0.7746	0.2927	0.2734	0.2702	-0.052	-0.012	-0.006
bio3	0.54591	0.10759	-0.7696	0.2275	0.0421	0.0444	0.1738	-0.024	0.0843	0.0548
bio4	-0.5367	-0.0944	0.812	-1E-03	0.1029	0.0599	-0.107	0.085	0.0747	0.066
bio5	0.84247	-0.0354	0.4806	0.1974	0.1258	-0.008	-0.007	0.0081	0.0287	-0.0002
bio6	0.97145	0.16254	-0.0134	-0.089	-0.05	-0.125	-0.026	-0.005	0.0395	0.0108
bio7	-0.4393	-0.3097	0.6653	0.4081	0.2489	0.1906	0.0315	0.0181	-0.025	-0.0176
bio8	0.81721	0.06551	0.5462	-0.066	0.0834	-0.097	0.0069	-0.044	-0.001	-0.0312
bio9	0.98694	0.08087	-0.0545	0.0321	-0.066	-0.074	-0.007	0.0098	-0.043	0.0227