

Appendix A

TABLE A1. Correction factor: used to estimate body mass from photogrammetry projects for each species and specific missing silhouette scenarios (e.g., 3a, 4b, 5c, 7h) as explained in Table 3 and Fig. 7 (main text). Correction values should be substituted in to equations provided in Table 1 and 2 (main text) to calculate PBM from missing silhouette scenarios. Bongo, Pygmy hippopotamus and Bengal tiger were excluded due to sample size or lack of standard photograph angles.

Species	Arabian oryx	Cheetah	Chimpanzee	Hyena	Lion	Nyala	Red river hog
9	0.297 ± 0.029	0.293 ± 0.016	0.235 ± 0.022	0.207 ± 0.026	0.208 ± 0.028	0.154 ± 0.037	0.110 ± 0.027
8	0.315 ±0.030	0.308 ± 0.010	0.254 ± 0.048	0.225 ± 0.031	0.228 ± 0.048	0.174 ± 0.028	0.121 ± 0.025
7h	0.334 ± 0.040	0.320 ± 0.015	0.311 ± 0.058	0.242 ± 0.024	0.240 ± 0.046	0.194 ± 0.032	0.141 ± 0.031
7f	0.328 ± 0.044	0.324 ± 0.011	0.284 ± 0.011	0.241 ± 0.029	0.240 ± 0.048	0.205 ± 0.023	0.130 ± 0.029
7b	0.321 ±0.035	0.323 ± 0.009	0.284 ± 0.011	0.234 ± 0.029	0.240 ± 0.053	0.214 ± 0.027	0.130 ± 0.028
7s	0.328 ± 0.032	0.362 ± 0.025	0.287 ± 0.007	0.256 ± 0.030	0.279 ± 0.030	0.190 ± 0.032	0.159 ± 0.036
6a	0.340 ± 0.045	0.387 ± 0.032	0.364 ± 0.075	0.270 ± 0.013	0.264 ± 0.045	0.218 ± 0.026	0.174 ± 0.020
6b	0.346 ± 0.045	0.340 ± 0.015	0.304 ± 0.002	0.275 ± 0.036	0.292 ± 0.031	0.214 ± 0.034	0.169 ± 0.037
6c	0.352 ± 0.039	0.430 ± 0.053	0.317 ± 0.009	0.299 ± 0.042	0.330 ± 0.021	0.220 ± 0.037	0.186 ± 0.027

6d	0.361 ± 0.042	0.343 ± 0.008	0.311 ± 0.016	0.259 ± 0.040	0.265 ± 0.066	0.270 ± 0.051	0.146 ± 0.032
6e	0.346 ± 0.045	0.351 ± 0.023	0.311 ± 0.016	0.291 ± 0.021	0.286 ± 0.038	0.206 ± 0.033	0.173 ± 0.024
5a	0.383 ± 0.058	0.461 ± 0.026	0.364 ± 0.017	0.347 ± 0.032	0.382 ± 0.051	0.254 ± 0.047	0.274 ± 0.047
5b	0.390 ± 0.075	0.394 ± 0.034	0.421 ± 0.006	0.327 ± 0.013	0.319 ± 0.036	0.236 ± 0.046	0.176 ± 0.040
5c	0.385 ± 0.036	0.426 ± 0.026	0.352 ± 0.014	0.318 ± 0.034	0.337 ± 0.026	0.238 ± 0.042	0.200 ± 0.042
4a	0.462 ± 0.088	0.500 ± 0.029	0.477 ± 0.032	0.441 ± 0.008	0.445 ± 0.052	0.321 ± 0.033	0.353 ± 0.059
4b	0.460 ± 0.038	0.450 ± 0.037	0.477 ± 0.035	0.316 ± 0.031	0.368 ± 0.055	0.323 ± 0.035	0.270 ± 0.069
3a	0.577 ± 0.073	0.626 ± 0.061	0.664 ± 0.014	0.514 ± 0.040	0.555 ± 0.092	0.525 ± 0.111	0.477 ± 0.141
3b	0.586 ± 0.070	0.650 ± 0.044	0.634 ± 0.080	0.513 ± 0.036	0.533 ± 0.050	0.400 ± 0.052	0.409 ± 0.075

TABLE A2. Correction factor: used to estimate body mass from photogrammetry projects for each species and specific missing silhouette scenarios (e.g., 3a, 4b, 5c, 7h) as explained in Tables 1 and 2 (main text). Correction values should be substituted in to equations provided in Tables 1 and 2 (main text) to calculate PBM from missing silhouette scenarios. Bongo, Pygmy hippopotamus and Bengal tiger were excluded due to sample size or lack of standard photograph angles.

Species	Sable antelope	Springbok	Western lowland gorilla	Zebra	Elephant	White rhino
9	0.152 ± 0.015	0.223 ± 0.021	0.256 ± 0.030	0.165 ± 0.012	0.211 ± 0.035	0.182 ± 0.029
8	0.189 ± 0.008	0.234 ± 0.026	0.270 ± 0.022	0.201 ± 0.006	0.223 ± 0.039	0.197 ± 0.024
7h	0.255 ± 0.019	0.252 ± 0.035	0.287 ± 0.025	0.222 ± 0.012	0.245 ± 0.043	0.233 ± 0.025
7f	0.228 ± 0.010	0.257 ± 0.035	0.294 ± 0.026	0.222 ± 0.011	0.241 ± 0.036	0.224 ± 0.029
7b	0.224 ± 0.020	0.250 ± 0.036	0.287 ± 0.024	0.215 ± 0.008	0.238 ± 0.046	0.210 ± 0.027
7s	0.202 ± 0.017	0.264 ± 0.030	0.306 ± 0.029	0.218 ± 0.004	0.246 ± 0.040	0.218 ± 0.022
6a	0.272 ± 0.005	0.299 ± 0.027	0.324 ± 0.027	0.246 ± 0.017	0.272 ± 0.050	0.251 ± 0.022
6b	0.291 ± 0.011	0.283 ± 0.035	0.337 ± 0.035	0.256 ± 0.011	0.265 ± 0.039	0.272 ± 0.030
6c	0.211 ± 0.018	0.303 ± 0.032	0.333 ± 0.023	0.252 ± 0.017	0.284 ± 0.049	0.245 ± 0.024

6d	0.318 ± 0.015	0.293 ± 0.057	0.321 ± 0.029	0.246 ± 0.015	0.292 ± 0.082	0.266 ± 0.043
6e	0.265 ± 0.018	0.285 ± 0.034	0.322 ± 0.030	0.251 ± 0.033	0.261 ± 0.046	0.268 ± 0.030
5a	0.341 ± 0.035	0.326 ± 0.037	0.396 ± 0.048	0.321 ± 0.020	0.324 ± 0.073	0.358 ± 0.034
5b	0.263 ± 0.007	0.332 ± 0.059	0.377 ± 0.052	0.329 ± 0.066	0.317 ± 0.031	0.309 ± 0.030
5c	0.266 ± 0.003	0.314 ± 0.027	0.397 ± 0.052	0.308 ± 0.031	0.319 ± 0.034	0.340 ± 0.036
4a	0.359 ± 0.095	0.378 ± 0.048	0.463 ± 0.066	0.420 ± 0.073	0.488 ± 0.056	0.457 ± 0.054
4b	0.392 ± 0.027	0.366 ± 0.046	0.431 ± 0.033	0.315 ± 0.032	0.369 ± 0.050	0.299 ± 0.028
3a	0.673 ± 0.169	0.489 ± 0.071	0.594 ± 0.114	0.614 ± 0.067	0.560 ± 0.063	0.615 ± 0.059
3b	0.454 ± 0.003	0.460 ± 0.076	0.540 ± 0.051	0.455 ± 0.063	0.557 ± 0.119	0.385 ± 0.138

