Oikos

O17065

Jovani, R., Mavor, R. and Oro, D. 2008. Hidden patterns of colony size variation in seabirds: a logarithmic point of view. – Oikos 117: 1774–1781.

Figure S1. A variable number of "sub-sites" are grouped within "sites", and are at variable nearest distances between them.

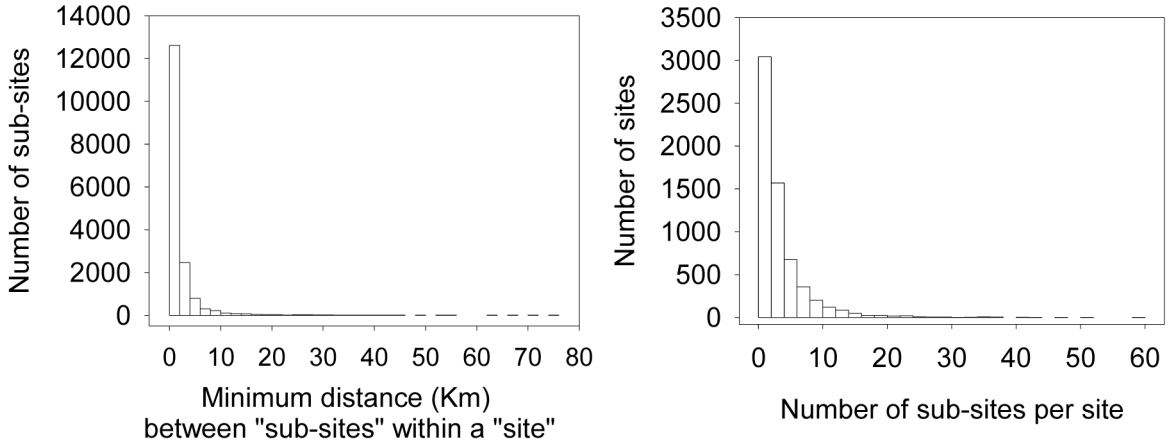

Figure S2. Colony size frequency distributions when using either “sub-sites” (i.e. Figure 2b) or “sites” as the colony spatial scale.

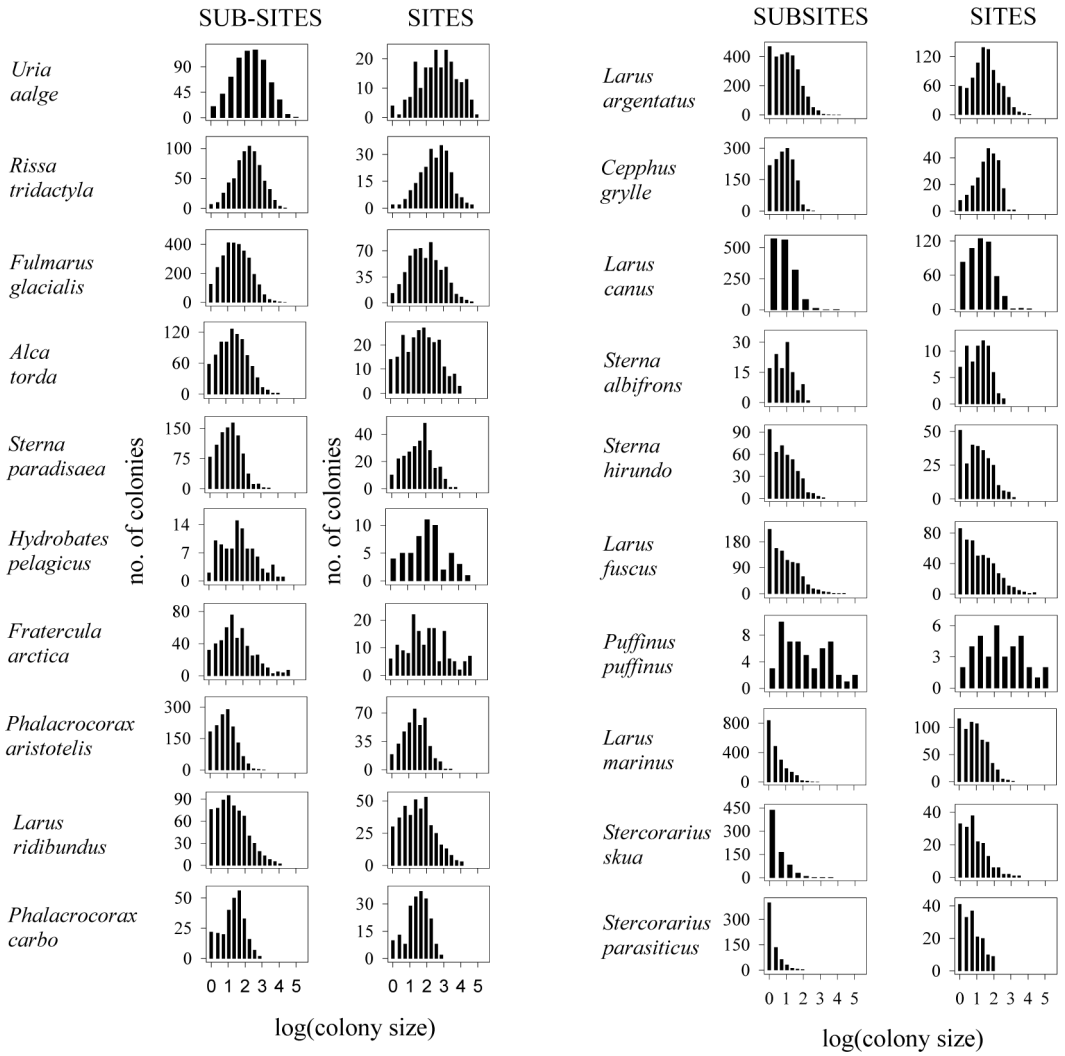

Figure S3. Robustness of the different characteristics of colony size frequency distributions when using either "sub-sites" or "sites" as the colony spatial scale. Inset statistics are one-tailed Spearman correlations.

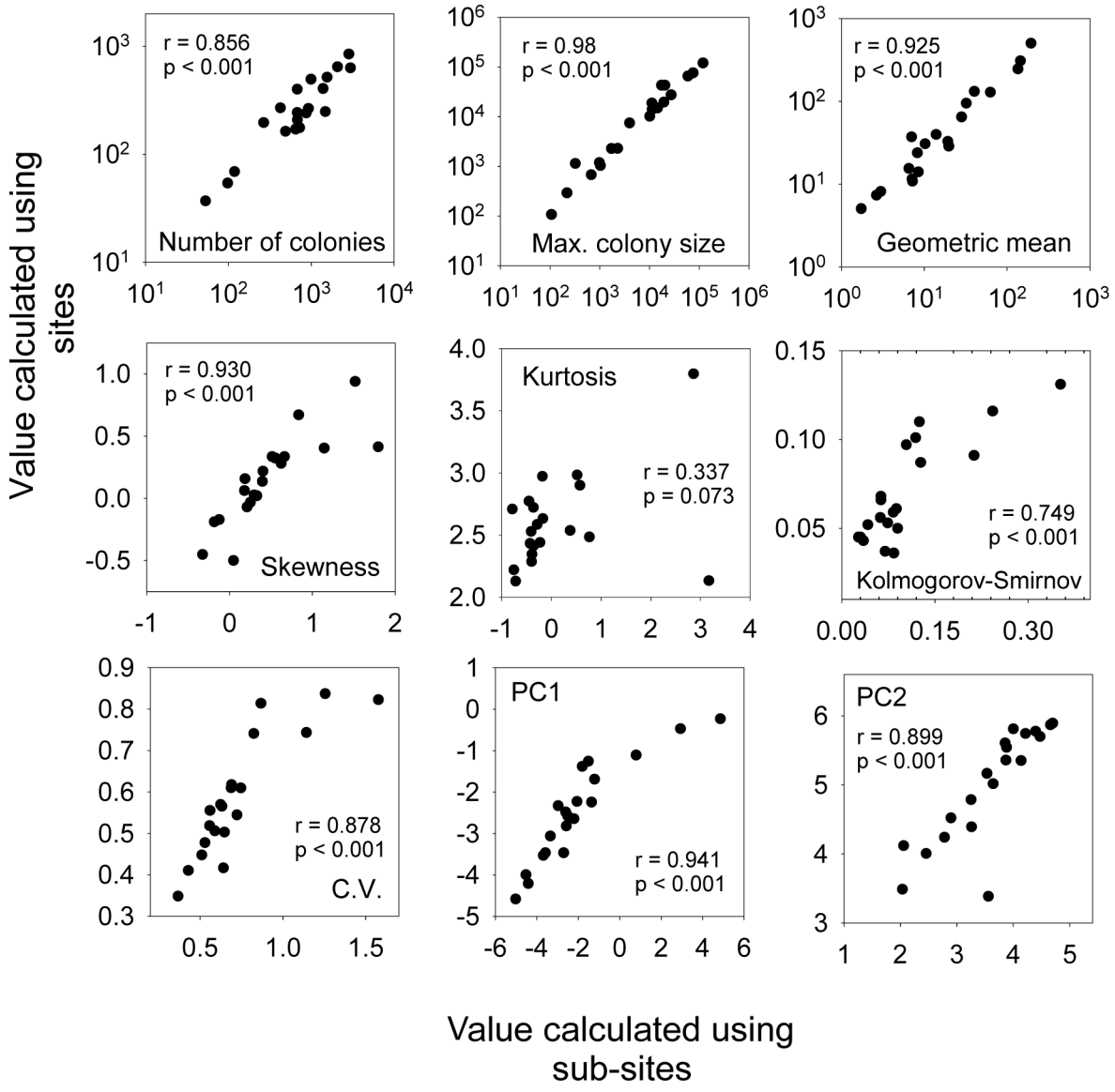

Table S1. Characteristics of the colony size frequency distributions (CSFDs) for the different species analysed using the "site" as the colony scale. Eigenvalues for the two first principal components of the principal component analysis (PCA) are also shown. Minimum colony size was not introduced in the PCA because is not a variable characteristic between species. c.s. means colony size.

Bird species	Number of colonies	Number of nests	Min c.s.	Max c.s.	Geometric mean	Kurtosis	Skewness	Coefficient of variation	Kolmogorov -Smirnov
Northern fulmar (Fulmarus glacialis)	630	537988	1	42765	94.521	2.529	0.157	0.477	0.043
Manx shearwater (Puffinus puffinus)	37	332272	1	120000	245.658	2.220	0.218	0.570	0.087
European storm-petrel (Hydrobates pelagicus)	54	82818	1	27297	128.552	2.413	0.020	0.519	0.068
Great cormorant (Phalacrocorax carbo)	196	13628	1	675	28.749	2.773	-0.453	0.448	0.059
European shag (Phalacrocorax aristotelis)	405	32222	1	2277	23.869	2.585	0.027	0.503	0.037
Arctic skua (Stercorarius parasiticus)	171	2136	1	107	5.062	2.132	0.414	0.822	0.131
Great skua (Stercorarius skua)	176	9635	1	2293	7.353	3.797	0.939	0.837	0.116
Black-headed gull (Larus ridibundus)	400	141871	1	14851	32.722	2.634	0.335	0.617	0.053
Common gull (Larus canus)	517	49728	1	18672	15.472	2.983	0.281	0.609	0.05
Lesser black-backed gull (Larus fuscus)	494	116640	1	19487	14.020	2.900	0.671	0.814	0.11
Herring gull (Larus argentatus)	848	148869	1	10129	30.633	2.722	0.135	0.544	0.036
Great black-backed gull (Larus marinus)	645	19616	1	1189	8.169	2.484	0.404	0.743	0.091
Black-legged kittiwake (Rissa tridactyla)	243	415994	1	42577	307.499	2.973	-0.189	0.348	0.045
Common tern (Sterna hirundo)	269	13859	1	1033	10.835	2.346	0.324	0.741	0.101
Arctic tern (Sterna paradisaea)	265	48469	1	7428	39.732	2.440	-0.069	0.506	0.056
Little tern (Sterna albifrons)	69	2093	1	291	11.545	2.128	-0.033	0.610	0.097
Common guillemot (Uria aalge)	208	1044856	1	75493	501.759	2.432	-0.172	0.410	0.045
Razorbill (Alca torda)	241	144743	1	13975	64.765	2.286	0.062	0.555	0.052
Black guillemot (Cepphus grylle)	248	21731	1	1137	37.135	2.709	-0.500	0.416	0.061
Atlantic puffin (Fratercula arctica)	163	600751	1	65170	131.778	2.536	0.335	0.565	0.066
Principal Component Analysis Eigenvalues for each characteristic of CSFD									
PC1				-0.615	-0.877	0.197	0.749	0.959	0.861
PC2				0.701	0.262	0.664	0.584	0.159	-0.070