

Spatial patterns of distribution and relative abundance of coastal shark species at the Galapagos Marine Reserve

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Figure S1. Multivariate pseudo standard error (*MultSE*; Anderson & Santana-Garcon 2015) as a function of the number of replicates (sample size) based on zero-adjusted Bray-Curtis (Clarke et al. 2006) dissimilarities calculated on square-root transformed shark abundance data from the pilot study from (a) benthic and (b) pelagic stereo-BRUVs for four different soak times (upper right legend), with permutation-based means and bias-adjusted bootstrap-based error bars (10,000 resamples).

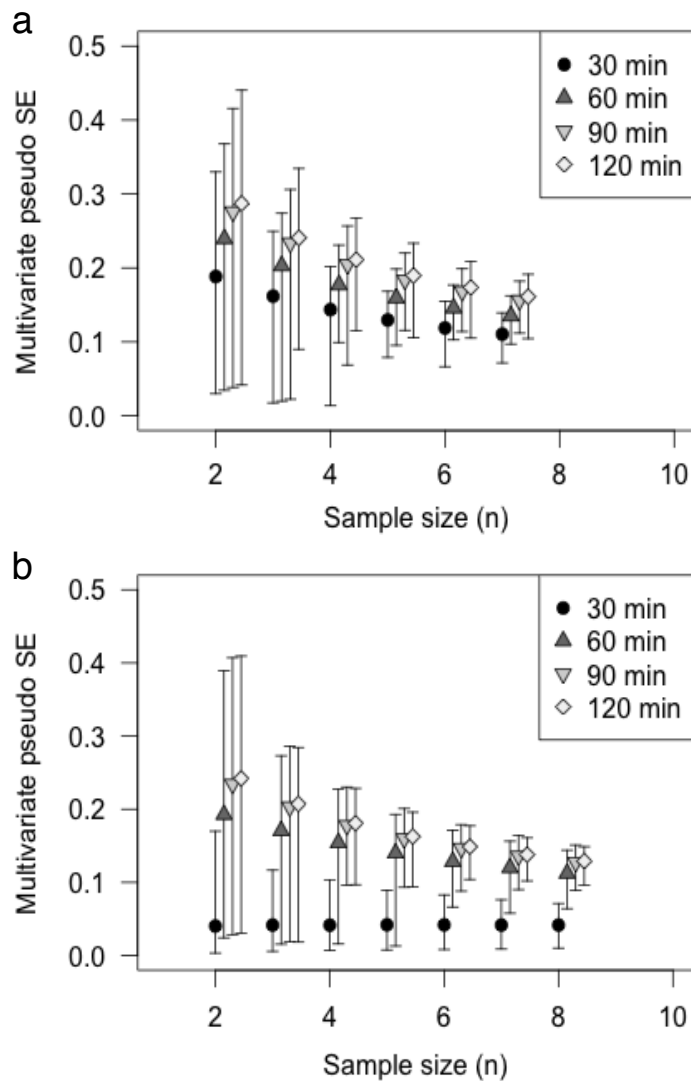


Figure S2. Benthic stereo-BRUV design used in the study. The camera frame remains floating at *ca* 1 m over the seabed.

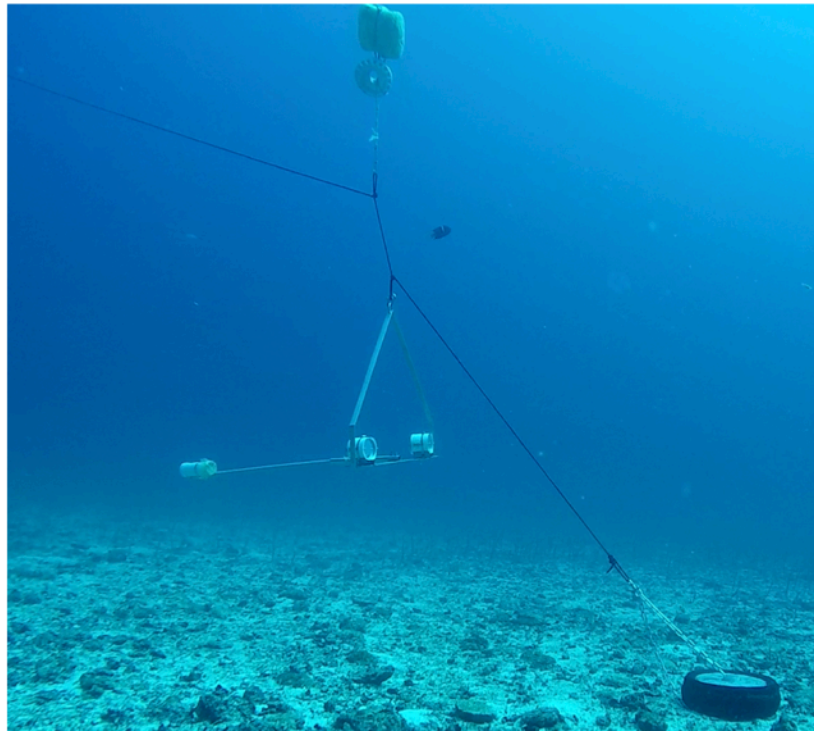


Figure S3 (*next page*). Distance-based redundancy analysis (dbRDA) ordinations for the fitted model of the (a) full, (b) semipelagic and (c) benthic shark assemblages based on a zero-adjusted Bray-Curtis similarity matrix (Clarke et al. 2006) produced from square-root-transformed relative abundances of shark species (*cMaxN*) averaged by site and position in the water column (benthic *vs* pelagic). Corresponding bioregions are indicated by coloured icons (upper right legend). Overlying vectors in blue show the environmental and biological predictors fitted by the model.

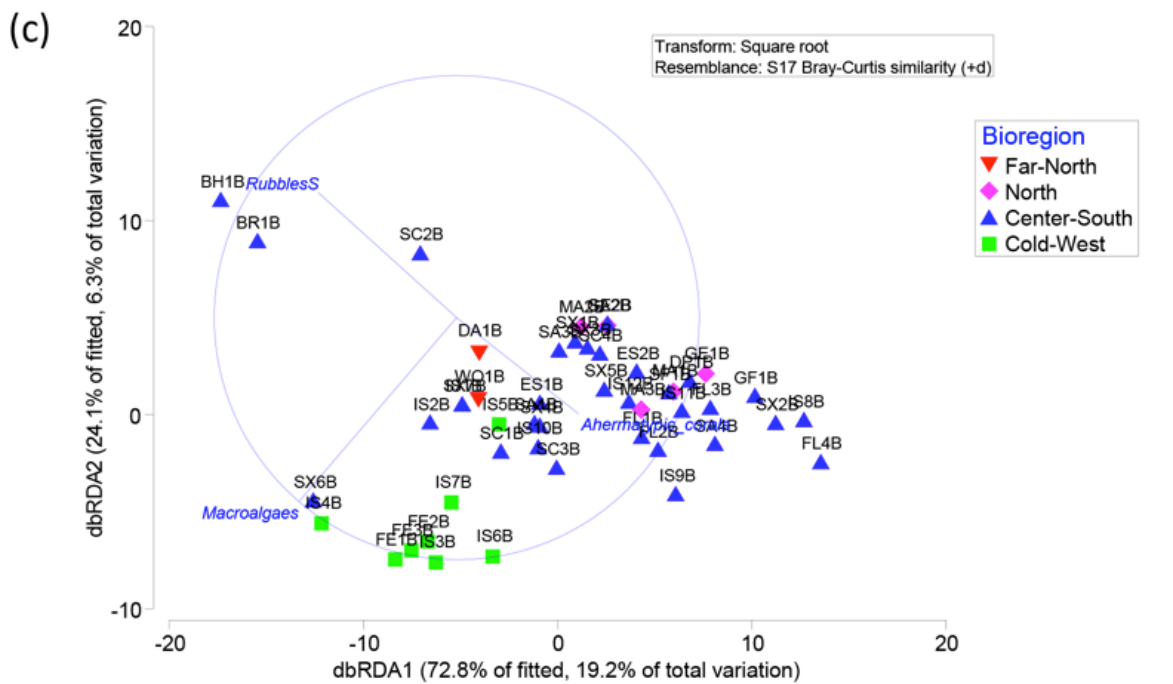
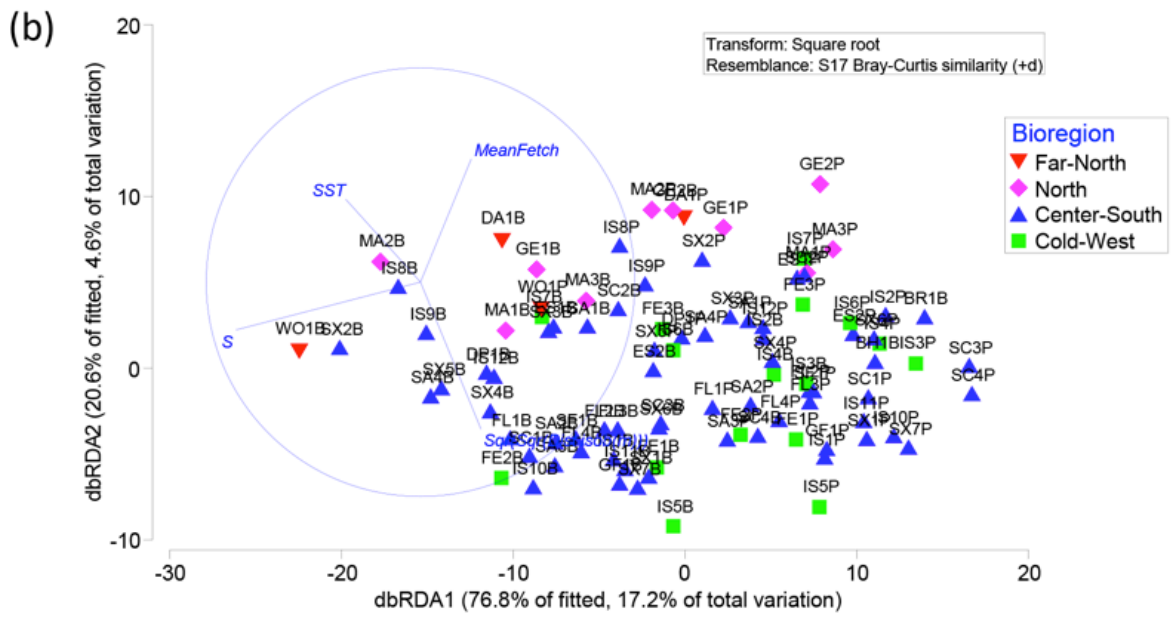
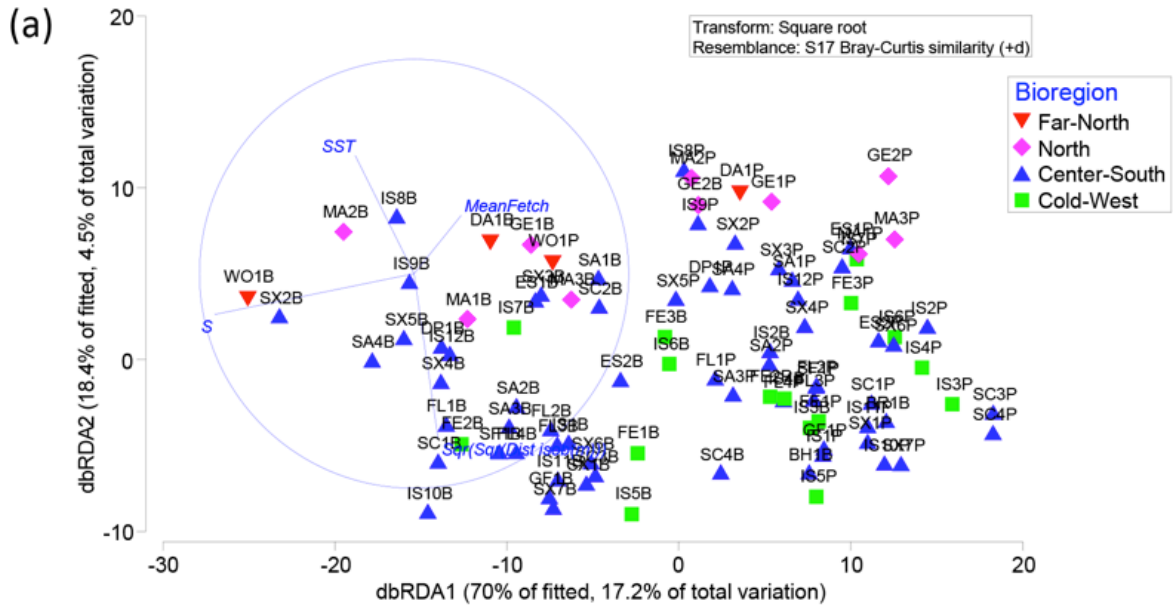


Table S1. Abbreviations of the geographic strata

Strata	Abbreviation
Darwin and Wolf	D_W
Marchena and Genovesa	M_G
Isabela Northwest	IS_NW
Isabela Northeast	IS_NE
Isabela East	IS_E
Isabela Southeast	IS_SE
Isabela Southwest	IS_SW
Canal Bolivar	C_BLV
Fernandina West	FE_W
Santiago North	SA_N
Santiago South	SA_S
Santa Cruz North	SX_N
Santa Cruz East	SX_E
Santa Cruz South	SX_S
Santa Cruz West	SX_W
San Cristobal North	SC_N
San Cristobal_South	SC_S
Submerged Reef	S_REEF
Floreana	FL
Española	ESP
Islets	ISL

Table S2. Performance of the boosted regression tree (BRT) models using the environmental and biological variables (Table 1) to predict total log-abundance and diversity of sharks, and occurrences of individual shark species (oc.), using proportion of the deviance explained assessed by cross-validation (CVDE) and area under the receiver operator characteristic curve (AUC) scores.

BRT model	CVDE	AUC
Shark abundance	0.331	—
Shark diversity	0.923	—
<i>Carcharhinus galapagensis</i> (oc.)	—	0.794
adult	—	0.857
juvenile	—	0.770
<i>Galeocerdo cuvier</i> (oc.)	—	0.704
<i>Sphyrna lewini</i> (oc.)	—	0.701
adult	—	0.765
juvenile	—	0.774
<i>Triaenodon obesus</i> (oc.)	—	0.824
Triakidae spp. (oc.)	—	0.761
<i>Heterodontus quoyi</i> (oc.)	—	0.700