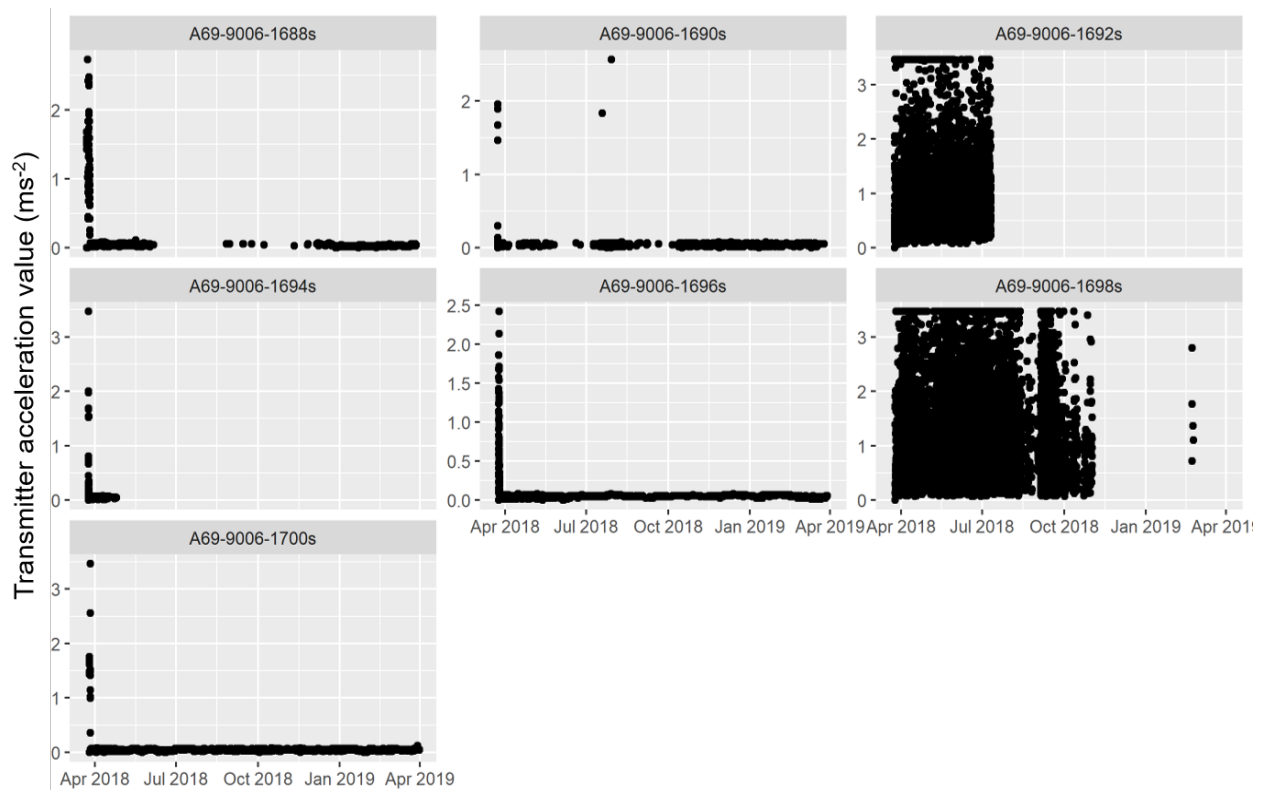## SUPPLEMENTAL FIGURES

Figure S1: Raw detection plot indicating acceleration values from acoustic transmitters equipped with acceleration sensors. The individuals that showed consistently low values (i.e., the 5 left-most subplots) were deemed to have either expelled their tags, were consumed and the transmitter was dropped within detection range of receivers or died by other means shortly after tagging.
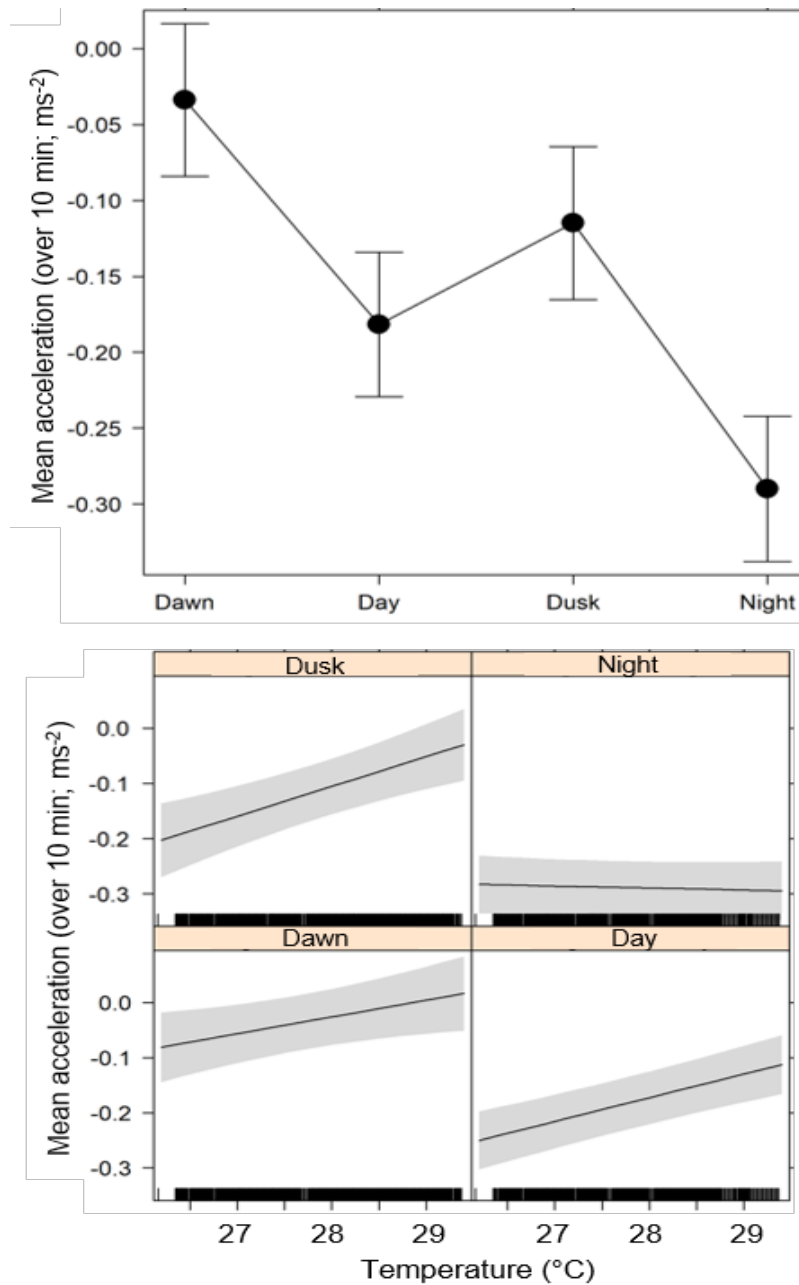
Figure S2: Effects plots of significant terms from the GLMM examining transmitter acceleration values from two individuals with non-zero acceleration data. Black lines bounded by shaded areas (continuous variables) and points bounded by error bars (discrete variables) represent the mean and pointwise 95% confidence band of fitted values based on standard errors.
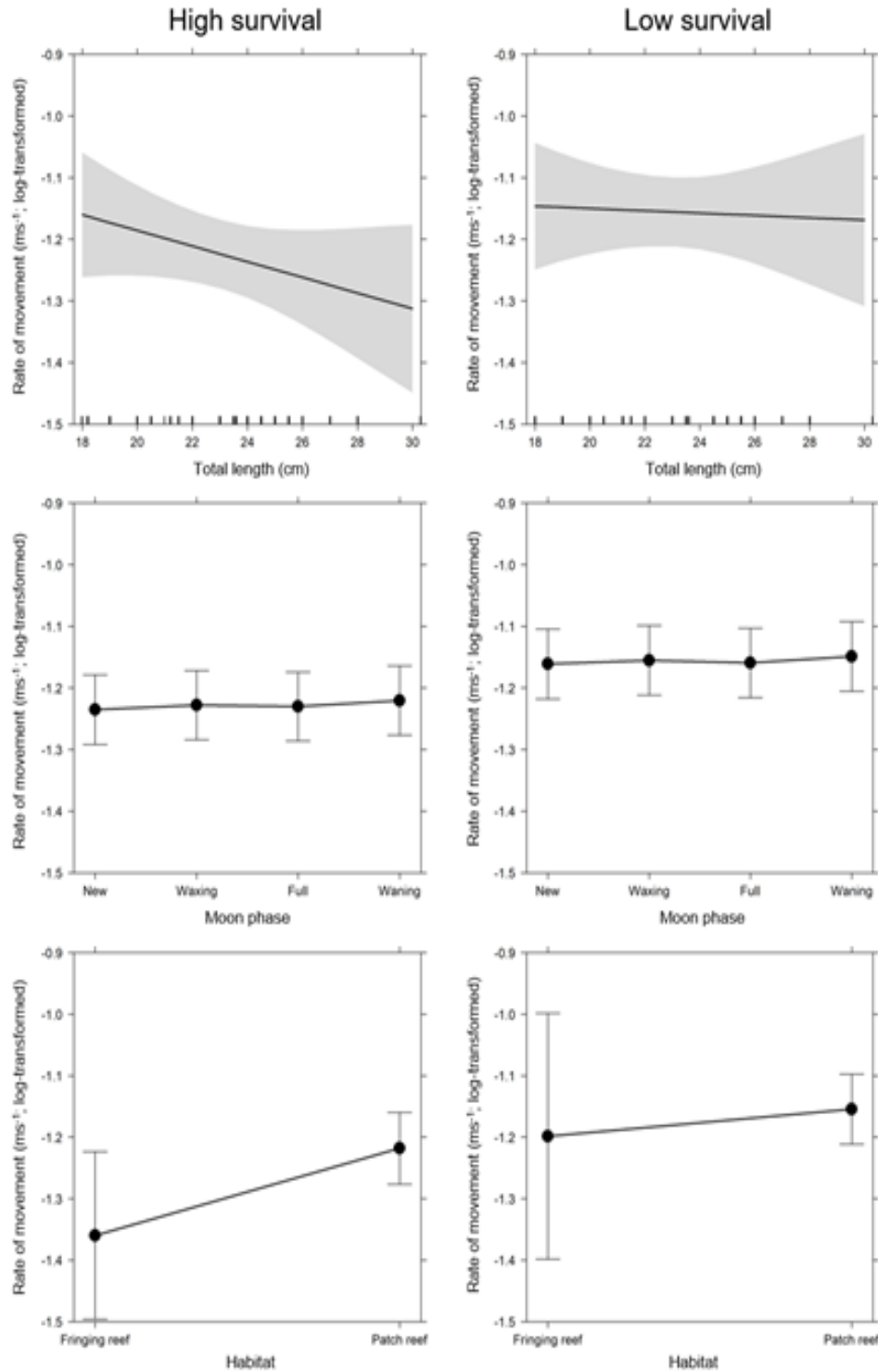
Figure S3: Effects plots of non-significant terms from the GLMM examining biotic and abiotic drivers of rates of lionfish movement for both high and low survival scenarios. Black lines bounded by shaded areas (continuous variables) and points bounded by error bars (discrete variables) represent the pointwise 95% confidence band of fitted values based on standard errors.
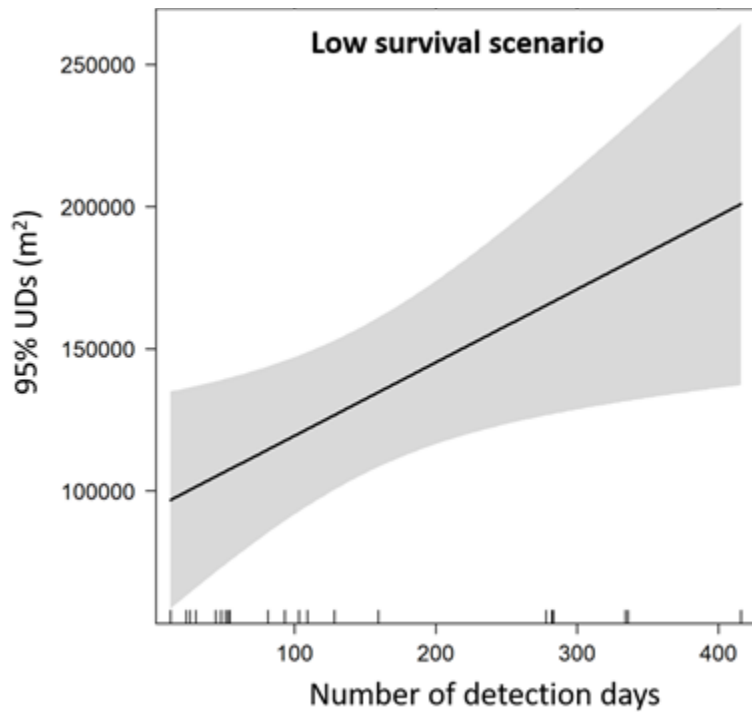
Figure S4: Effects plot of the significant relationship between lionfish home range size and the number of days lionfish were detected within the 35 km^2 BIRNM acoustic array off St. Croix, USVI for the low survival scenario. The shaded area (continuous variables) represents the pointwise 95% confidence band of fitted values based on standard errors.