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The relative importance of lunar phase and environmental conditions on striped marlin *(Tetrapturus audax)* catches in sport fishing

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We used generalized additive mixed models to analyze data on striped marlin *(Tetrapturus audax)* catches in Baja California sport fisheries (1987-1989) to investigate the relative importance of lunar phase, sea surface temperature (SST), El Niño/Southern Oscillation (ENSO) index, and vessel effects on catch per unit effort (CPUE). The results indicate that the moon phase has no or little (<1% of variance explained) influence on CPUE. In contrast, both SST (10%) and ENSO (6%) influenced CPUE positively. While most of the variation in CPUE remains unexplained (53%), the vessel identity explained small (ca. 1.5%) but significant amount of variance in CPUE. Hence, sport fishermen wishing to maximise their striped marlin catches would best plan their trips on the basis of weather conditions and boat/crew identities, rather than on the basis of lunar phase

Palabras clave: Striped marlin, CPUE, GAM, Lunar periodicity, Periodic regression