The acoustic sound scape at two sites within the NEPTUNE Canada observatory: Identifying the potentials of masking

Elevated anthropogenic noise in marine soundscapes and their potential to decrease communication efficacy of marine organisms is of increasing concern. Using the acoustic data collected at the Folger Passage and Barkley Canyon sites over a one year period, we sought to quantify the levels of vessel traffic and occurrence of biological sounds to determine the potential impact of anthropogenic sound in masking acoustic communication. A subset of acoustic data recorded from June 2010 to May 2011 was analyzed manually to identify recurrent sounds. This analysis was supplemented with calculations of ambient sound levels throughout the year to determine variations temporally and by frequency . Implications of anthropogenic sound levels as a result of passing ships or self-generated instrument noise will be discussed.

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