

Project Update: July 2021

Before and during COVID-19 lockdowns, passive acoustic monitoring data was collected in the Archipelago of Bocas del Toro (Panama), in order to assess dolphin stress level based on the hypothesis that the increase in dolphin whistle frequency modulation is an indicator of stress. Our previous findings indicated that dolphin habitat in Bocas del Toro is 'stressful' due to the high number of tour boats/dolphin interactions and lack of compliance with dolphin-watching regulations. For this reason, we tested the hypothesis that during COVID-19 lockdowns dolphin whistle modulation should decrease. Our preliminary results indicated that effectively dolphin whistle modulation decreased during the lockdown. Interestingly, boat presence did not vary, but the type of boat traffic shifted within the archipelago from tour (dolphin-watching) to transport boats. Our results provide key information on dolphin communication and results can be translated into mitigation strategies to reduce the impact of tour boats on dolphins in Bocas del Toro.



Bottlenose dolphin, one of the dolphins of Dolphin Bay in Bocas del Toro. © Betzi Pérez.



Hydrophone deployment under the sea. © Carolyn Kovacs.



Two bottlenose dolphins diving into the waters of Bocas del Toro. © Betzi Pérez.