Why did they die? Exploring the primary cause of death and reviewing anatomy in petrel species admitted to BirdCare Aotearoa in Auckland in 2021

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Seabirds are a highly vulnerable group of animals threatened by a growing number of anthropogenic activities including light attraction (Image.1) and plastic ingestion. Using the Wildlife Rehabilitation Medical Database we found that between the months of January and May 2021, 148 Cook's petrels (*Pterodroma cookii*) were received at BirdCare Aotearoa (BCA). This species is endemic to New Zealand and is listed as vulnerable by the IUCN. Often it is the fledgling Cook's petrels on their maiden flight which are brought into BCA (Image. 2). Many of these seabirds, along with other seabird species, were brought to BCA and died of unknown causes. It is crucial to understand why/how these seabirds died to enhance our knowledge in this area and try to reduce it.

Therefore, through performing necropsies we seek not only to understand the cause of death, but also to increase our knowledge about their anatomy, physiology and natural history. Additionally, we aim to understand if there is a correlation between sensory features and the risk of attraction towards fishing vessels, certain colours of lights and plastics. Our methodologies will involve collaborations between colleagues from BCA, the University of Auckland and Massey University. Necropsies will be performed following standard operating procedures at BirdCare Aotearoa in order to establish cause of death followed by sensory analysis.

Image 1. Cook's petrel suffering from head trauma from light attraction.

Image 2. Cook's petrel being transferred at BCA

Images courtesy of Maria Robinson.