

ANTHROPIC FACTORS AS A CAUSE OF DEATH OF MARINE BIRDS IN THE CANARY ISLANDS

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Abstract: In the Canary Islands, the impact of human activities on marine birds is unknown. This study aims to evaluate which species are affected, frequency of affectation, most vulnerable species and anthropogenic activities are involved, in order to implement future preventive measures for conservation. In the present study, complete standardized necropsies of Canarian seabirds have been carried out, which, through the Animal Health Surveillance Program coordinated by the Government of the Canary Islands (Red Vigía Canarias), have been sent to the Veterinary Faculty of the University of Las Palmas de Gran Canaria. With the collaboration of the Clinical and Analytical Toxicology Service (SERTO), the presence or absence of toxic substances and their involvement in the cause of death were determined. Inclusion criteria: Marine birds necropsied during 2020 and 2021, complete standardized necropsies and anthropic death as a pathological entity. Cases of interaction with fishing have been excluded from this study. 57 animals belonging to 9 different species (*A.cinerea*, *A.purpurea*, *B.bulweri*, *C.diomedea borealis*, *C.alexandrin*, *C.dubius*, *E.garzetta*, *L.Michaellis*, *P.haliaetus*), exceeded the criteria for inclusion and exclusion of a total of 291 necropsied animals. An analysis of frequencies (absolute and relative) and Pearson's Chi-square test ($p < 0.05$) were performed to establish the comparison of proportions between the variables analyzed (etiological diagnosis, type of trauma, species, body condition, origin and presence of microplastics in the digestive system). The etiological diagnoses were categorized into: Intoxication, electrocution and anthropogenic trauma. The traumas were categorized as: collision with a wind turbine, collision with an overhead power line, collision with a motor vehicle, collision with an aircraft, poaching, and being run over. Preliminary results reveal that 92.99% die from trauma (illegal hunting, collision with an aircraft and collision with a wind turbine, the most frequent traumas). 5.26% due to intoxication and 1.75% due to electrocution.

Key words: Anthropogenic, collision, seabirds, necropsy, Canary Islands.

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