

**WEATHER AND BIRD STRIKES:
AN INVESTIGATION AT A COASTAL AIRPORT.**

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Abstract

Bird strikes are relatively rare events and it is now known that flying birds actively avoid moving aircraft. The noise emitted by aircraft together with their lights are believed to be the stimuli to which the birds respond. It is reasonable to assume therefore that certain types of weather conditions may interfere with the capacity of the birds to efficiently detect either or both the visual and aural cues. Immature birds appear to be at greater risk than do adults and there is also evidence that recently arrived immigrants to the novel airport environment are struck with a relatively higher frequency. These observations permit the stratified sampling of a bird strike database (1978-99) at Dublin Airport so that seasonal, monthly, species and age specific relationships with prevailing weather conditions can be analysed. This study involves a multivariate analysis of the frequency of bird strikes and meteorological data set which includes barometric pressure, precipitation, air and ground temperatures, wind speeds and directions, an oceanic wave index and visibility.