

## The Spatial concentration of human-peacock conflict

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### Abstract

Human-wildlife conflict is harmfully affecting the wellbeing of both people and animals. Human – peacock conflict in the wet zone of Sri Lanka is increasing at present and yet the information on this conflict is limited. Therefore, the main aim of this study was to investigate the spatial concentration of peacock habitats and the areas where impairment created by peacock species. Matara Divisional secretariat Division in Matara district was selected as the study area. A field survey has been carried out to identify the absolute locations (latitudes and longitudes) of peacock habitats and the affected areas. A handheld Garmin e Trex 10 GPS recorder was used to record the geographic coordinates of the locations. A total of 849 locations were recorded, including 511 peacock habitats and 338 effected areas by the peacock. Kernel Density estimation was used as the main tool for hot spot identification. Two separate estimations were carried out to identify concentrations of habitats and affected areas. The analysis of data was accomplished, through the integrated use of Arc GIS 10.1 software packages along with Microsoft Excel analytical tool. Maps and graphs have been prepared in visualizing the results of the analysis. The results reviled that the peacock habitats and effected areas were in two different locations. Peacock habitats were widely spared in areas where tree species occur like Albesiya, Attoniya, and Hora. Further tea lands also identified as where peacocks prefer to stay. The bird stays those places between 6.30 pm to 7.30 am of the following day. The affected areas depend on the food availability for peacocks. The birds used to be at those locations from 7.30 am to 6.30 pm Lack of predators for peacock, not destroying the eggs, lack of layers of plants due to crop cultivation, snakes in farm oil plantations are the most common pull factors for peacocks to come to the villages.

*Keywords: Conflict, Habitats, Peacock affected areas, Land use, Hot spot.*

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