

Estimation of the Population Size of Crocodile *Crocodylus palustris* (Lesson, 1831) from Two Incomplete Survey Methods-Daylight Ground Counts and Night Counts

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Abstract: The population count of crocodiles was undertaken from the Warana basin of Maharashtra, India for successive two years 2013-14 and 2014-15. Two main survey methods Daylight Ground count and Night Count were used to access the population. As the Crocodile is a shy animal and the study area is so big it was impossible to locate every crocodile from the study area as well as to cover the whole study area. Hence population statistics was applied to calculate the population size of the Crocodile. The statistical approach explained by W. E. Magnusson (1978) was used for the present work. The calculation of probabilities for two survey methods estimated that the study area has about 182. It has an approximate variance of 806 and hence a standard error of ± 28.39 .

Keywords: Crocodile, Warana basin, Daylight Ground count, Night count, Incomplete counts, Population size, Probability, Variance, etc.

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