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Impact Of High Rise Bridges And Metrorail On Life Of Lepidopterans And Conservation Strategies in, Nagpur (M.S.), India: A Preliminary Report

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ABSTRACT

The present paper has attempted to report biodiversity in specific areas of Nagpur which are heavily inhabited by humans as well as polluted (air, water, soil & sound).The butterflies and moths have adapted to this altered environment, but due to regular decline in plant species which serve as food and dwelling place to survive and propagate the numbers of species and their populations are reducing at an alarming rate. Butterflies includes families like Nymphalidae**10**, Pieridae**5;** one species each of Lycanidae**,** Hesperiidae, Papilionidae respectively;while moths includes families likeErebidae**3**,Sphingidae**2,** one family each ofCrambidae, Noctuidae, Limacodidae**,**Geometridaerespectively. .The authors have proposed importance of growing potted ornamental and other plant species and maintenance of individual and community gardens compulsorily as the ultimate habitats as "Corridors" in residential flats, ownership houses, schools, offices, etc., in all cities and metropolitans. This strategy may in the long run either partly or wholly aid in conserving biodiversity of all butterfly and moth species and prevent their extinction due to various natural and anthropogenic cataclysm. Construction of bridges and fragmentation of their habitats has created obstacles for these creatures and will convert many as "Ecotone or Edge effect species" as is the case with spiders and other insect species and several vertebrates like amphibian, reptiles, some mammals and more aves. The circadian and circannual behavior of all these creatures are under the control of programmed gene and gene pools that had gradually evolved and spontaneously by mutation and is presently also evolving. Butterflies and Moths are indicators of quality and climate change of habitats.

Keywords: - Butterfly, Moth, Conservation, Metropolitan, Ecotone, Nagpur.

INTRODUCTION:

Butterflies and moths are ecological indicators of the natural and altered environment. In the present study specific areas of Nagpur metropolis were surveyed to know their biodiversity and impact of development and urbanization. Among insects butterfly and some moths are pollinator and indicator of plant health.

MATERIALS AND METHODS:

Field survey in Manewada-Besa and Piplafata area respectively was done in Oct 18 –19, 19-20 using binoculars to sight and digital camera Sony W830 14 MP, optical zoom 8X and