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Diversity of Butterflies Aroundpanje - Funde Wetland, Uran, Navi Mumbai West Coast of India

Aamod N. Thakkar¹, Pankaj T. Bhoye², Niketan R. Thakur*²

Veer Wajekar A. S. C. College, Mahalan Vibhag, Phunde, Uran, Raigad, Maharashtra, India *Corresponding Author: niketan36@gmail.com

Abstract: Uran is under heavy process of Urbanization, Industrialization, land filling, reclamation cutting of mangroves, shipping and port related activities resulting in fragmentation of natural habitats. Butterflies are bio-indicators of habitat quality and are sensitive to any changes taking place in habitat a survey of butterfly diversity of Panje –Funde wetland and nearby area was conducted for a period of one year from June 2017 to May 2018. During present investigation total of 66 species of butterflies belonging to 46 genera and 6 families were recorded. Butterflies from family Nymphalidae showed maximum species diversity dominance with 17 genera and 27 species followed by Lycaenidae with 10 genera and 10 species, Pieridae with 9 genera and 15 species Hesperiidae with 6 genera and 6 species, Papilionidae represented with 3 genera and 6 species, the least number of 1 genus and 2 species were recorded from the family Riodinidae. There is urgent need for effective habitat and biodiversity conservation program in this Eco sensitive area.

Keywords: Butterflies, Panje, Wetland, Diversity.

REFERENCES

- [1]. Ashish D. Tiple,(2012). Butterfly species diversity, relative abundance and status in Tropical Forest ResearchInstitute, Jabalpur, Madhya Pradesh, central India 4(7): pp 2713–2717.
- [2]. Ehrlich P. R. (1984). The Structure and Population of Butterfly Production, The Biology of Butterflies; Academic Press London.
- [3]. Griffis R. L., Mann S. S. and Wagner M. R. (1999). The sustainability of butterflies as indicator of Ecosystem Condition. A Comparison of Butterfly Diversity across Stand and Treatment in Northern Arizona
- [4]. Guptha, M. B., Rao, P.V.C., Reddy, D. S., Maddala, S.R.S.C. S. And Babu, P.M. (2012) A PreliminaryObservation on Butterflies of Seshachalam Biosphere Reserve, Eastern Ghats Andhra Pradesh,India. *World Journal of Zoology* 7 (1): 83-89.
- [5]. Harsh S. (2014). Butterfly diversity of Indian institute of forest management, Bhopal, Madhya Pradesh, India.;1–4.
- [6]. Kehimkar, I. (2008). The Book of Indian Butterflies. Publishedby Bombay Natural History Society, Mumbai. 497 p.
- [7]. Kasambe Raju (2012), Maharashtrateel Fulpakhare, Published by Sahitya Prasar Kendra.
- [8]. Kunte Krushnamegh (2000) Butterflies of PeninsularIndia. Published by Universal Press (India) Ltd.
- [9]. Öckinger E, Eriksson AK, Smith HG. (2006) Effects of grassland abandonment, restoration and management on butterflies and vascular plants Biological Conservation.;133(3):291–300.
- [10]. Öckinger E, Dannestam Å, Smith HG. (2009) The importance of fragmentation and habitat quality of urban grasslands for butterfly diversity.;93(1):31–37.
- [11]. Oostermeijer, J. G. B. And Van Swaay, C. A. M. (1998). The relationship between butterflies andenvironmental indicator values: a tool for conservation in a changing landscape. Biologicalconservation, 86(3): 271-280.
- [12]. Mukherjee SS, Banerjee GK, Saha P. Basu, Aditya G. (2015) Butterfly diversity in Kolkata, India: An appraisal for conservation management. Journal of Asia-Pacific Biodiversity.;8(3):210–221.

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- [13]. Mukherjee K, Ghosh D. (2018) Common banded peacock: record of new larval host plant of papiliocrino from Bankura, West Bengal.;33(12):11–14.
- [14]. Mukherjee M, Mukhopadhyay SK. (2012) Butterfly diversity and abundance with reference to habitat heterogeneityin and around Neora Valley National Park, West Bengal, India.;10(1):53–60.
- [15]. Murugan K. (2006) Bio-diversity of insects. Curr. Sci.; 91:1602-1603.
- [16]. Thomas, J. A. (2005). Monitoring change in the abundance and distribution of insects using butterflies and their indicator groups. "Philosophical Transactions of the Royal Society (B) 360: 339–357.
- [17]. Nelson Rodriques (2013). Butterflies of Mumbai, Published by Anitha Art Printers.
- [18]. New T. R., Pyle R. M., Thomas J. A., Thomas C. D. and Hammond P. C., (1995) Butterfly Conservation Management; Annual Reveiw2 of Entomology 40: 53-83.
- [19]. Parmesan C, Ryrholm N, Stefanescu C, Hill JK, Thomas CD, Descimon H, Huntley B, Kaila L, Kullberg J, Tammaru T, Tennant J, Thomas JA, Warren MS. (1999). Polewards shifts in geographical ranges of butterfly species associated with regional warming. Nature 399: P. 579-583.
- [20]. Pollard E. A (1977) method for assessing changes in the abundance of butterflies. Biological Conservation; 12(2):115–134.
- [21]. Preeti Dalvi, Pooja Desai, Rajendra Owalekar (2017) Studies on the Diversity and Abundance of Butterflies at Owalekar Wadi Butterfly Garden Res J. Chem. Environ. Sci. Vol 5 [1] February 2017: 23-30.
- [22]. Shaikh R.N., Chavan U.M. (2017). Butterfly diversity at Kharghar, Maharashtra, India as ecoindicators. Proceeding International conference Ecofreindly and socially responsive economy and equity:Issues and challenges of 21st centuary for emergent sustainable development amongst SAARC countries,pp40-45
- [23]. TanmoyDey and Jayati Ghosh (2016), A Study on the diversity and abundance of Butterfly fauna in urbangreen areas of Krishnagar, Nadia, West Bengal, pp 117-122.
- [24]. Vaan Swaay, C. A. M. and Warren M. S. (2012). Developing butterflies as indicators in Europe: current situations and future options.

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