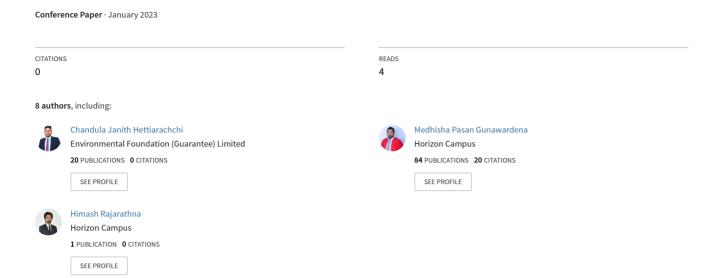
## Preliminary Survey on Fauna of Elamulla, Madaramnuwara, Sri Lanka



## Horizon Campus Research Symposium - 2022

"Youth Led Innovative action for sustainable Development"

17th January 2023, Horizon Campus, Knowledge City Malabe, Sri Lanka



Peer-reviewed abstracts of the Horizon Campus Research Symposium 2022

Horizon Campus Research Symposium - 2022

Horizon Campus Research Symposium - 2022

'Horizon Campus Research Symposium - 2022' (HCRS) is organized by the Horizon

Campus, Horizon College of Business and Technology (Pvt) Ltd., Malabe, Sri Lanka to

provide a forum for undergraduate students to present their research findings to discuss,

debate and share the research capabilities and experiences among staff and others. The

proceedings consist of 68 research abstracts and will be presented at the symposium.

The presentations will be done under five key areas, namely, Education, Information

Technology, Law, Management and Science.

We sincerely hope that this symposium would help and promote our students and

academics to be research active to carry out high-quality research and to support

industry development for wealth creation by transferring knowledge to the stakeholders

so that they can adapt it and reconfigure to its localized needs, satisfying the recipients'

requirements.

© Horizon Campus 2022

ISSN 2961-5739

Published by

**Horizon Campus** 

Knowledge City Malabe

Malabe, Sri Lanka

Tel: 0117 737 000

Email: hcrs@horizoncampus.edu.lk

Web: www.horizoncampus.edu.lk

Cover Design

Thejan Ratnayake

www.ambientpixeldesign.com

ii

## Preliminary Survey on Fauna of Elamulla, Madaramnuwara, Sri Lanka

Jayasuriya R.T.P.<sup>1,2,3</sup>, Sewwandi R.D.A. V<sup>1,2</sup>, Kularathna E.D.C.M.<sup>1,2</sup>, Rajarathna M.D.G.H.A.<sup>1,2</sup>, Sandamali A.D.P.H.<sup>1,2</sup>, Kumari W.I.M.<sup>1,2</sup>, Madubhashini P.W.A.<sup>1,2</sup>, Hettiarachchi C.J.<sup>2,3,4\*</sup> and Gunawardena M.P.<sup>1,2,3</sup>

<sup>1</sup>Faculty of Science, Horizon Campus, Knowledge City Malabe, Sri Lanka.

<sup>2</sup>Biodiversity Educational Research Initiative, Sri Lanka.

<sup>3</sup>Nature Beyond the Horizon (NatBeHo), Horizon Campus, Knowledge City Malabe, Sri Lanka.

<sup>4</sup>Department of Chemistry, Faculty of Graduate Studies, University of Kelaniya, Sri Lanka.

\*cjanith27@gmail.com

Mandaramnuwara has a wide range of faunal diversity due to its unique location at the foothills of the Pidurutalagala mountain range. Elamulla is an agricultural village within the Mandaramnuwara area and lacks biodiversity records through a proper survey. Therefore, a primary Visual Encounter Survey was conducted for two days in October 2022 to document several selected faunal groups including birds, butterflies, dragonflies, reptiles, and mammals (birds and mammals within 50 m distance from the road and butterflies, dragonflies, reptiles within 10 m distance from the road). The recorded fauna comprises 21 species, including the endemic Sri Lanka Hanging Parrot (Loriculus beryllinus) and near-threatened Sri Lankan white-eye (Zosterops ceylonensis). Two butterfly species were recorded during the survey. Marsh skimmer (Orthetrum luzonicum), which is considered endangered, is the only dragonfly species recorded. Endangered Gray's earth snake (Uropeltis melanogaster) is the only reptile observed during the survey. Out of three mammal species recorded Barking deer (Muntiacus muntiak) is considered as endangered. Green Frost Lizard (Calotes calotes) was identified as the only lizard species during this survey. The local communities of the area are constantly interacting with nature for their livelihoods. Irresponsible anthropogenic activities such as uncontrolled waste disposal by visitors, clearing of natural vegetation in and around ecologically sensitive areas and the high use of agrochemicals such as pesticides for agriculture were observed in the area which could threaten the habitats. Therefore, it is urged to educate the local communities about the significance of the biodiversity of the area to adopt community based sustainable conservation of biodiversity and manage the impacts of the visitors to the area. However, a detailed survey must be carried out to study the abundance and seasonal variations of the ecology in the study area.

Keywords: Elamulla, Endangered, Endemic, Mandaramnuwara, Piduruthalagala

## Acknowledgments

The authors gratefully acknowledge the financial assistance and invaluable contributions provided by BERI (Biodiversity Educational Research Initiative), Sri Lanka and Thema Collection.