World Academy of Science, Engineering and Technology International Journal of Geological and Environmental Engineering Vol:14, No:07, 2020

Reconsidering the Palaeo-Environmental Reconstruction of the Wet Zone of Sri Lanka: A Zooarchaeological Perspective

Authors: Kelum N. Manamendra-Arachchi, Kalangi Rodrigo

Abstract: Bones, teeth, and shells have been acknowledged over the last two centuries as evidence of chronology, Palaeoenvironment, and human activity. Faunal traces are valid evidence of past situations because they have properties that have not changed over long periods of time. Sri Lanka has been known as an Island, which has a diverse variation of prehistoric occupation among ecological zones. Defining the Paleoecology of the past societies has been an archaeological thought developed in the 1960s. It is mainly concerned with the reconstruction from available geological and biological evidence of past biota, populations, communities, landscapes, environments, and ecosystems. Sri Lanka has dealt with this subject and considerable research has been already undertaken. The fossil and material record of Sri Lanka's Wet Zone tropical forests continues from c. 38,000-34,000 ybp. This early and persistent human fossil, technical, and cultural florescence, as well as a collection of well-preserved tropical-forest rock shelters with associated 'on-site 'Palaeoenvironmental records, makes Sri Lanka a central and unusual case study to determine the extent and strength of early human tropical forest encounters. Excavations carried out in prehistoric caves in the low country wet zone has shown that in the last 50,000 years, the temperature in the lowland rainforests has not exceeded 5 degrees. Based on Semnopithecus Priam (Gray Langur) remains unearned from wet zone prehistoric caves, it has been argued that periods of momentous climate changes during the LGM and Terminal Pleistocene/Early Holocene boundary, with a recognizable preference for semi-open 'Intermediate' rainforest or edges. Continuous Genus Acavus and Oligospira occupation along with uninterrupted horizontal pervasive of Canarium sp. ('kekuna' nut) have proven that temperatures in the lowland rain forests have not changed by at least 5 oC over the last 50,000 years. Site Catchment or Territorial analysis cannot be no longer defensible, due to time-distance based factors as well as optimal foraging theory failed as a consequences of prehistoric people were aware of the decrease in cost-benefit ratio and located sites, and generally played out a settlement strategy that minimized the ratio of energy expanded to energy produced.

Keywords: palaeo-environment, prehistory, palaeo-ecology, zooarchaeology

Conference Title: ICAS 2020: International Conference on Archaeological Science

Conference Location: Toronto, Canada Conference Dates: July 16-17, 2020