

Biodiversity and Ecological Health

Theme Talk

Biodiversity of Sri Lanka Present Status and Future Needs

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Even though Sri Lanka is a small island, its biodiversity is significantly important, both in a regional and global scale. Sri Lanka has the highest species density (number of species present per 10,000 km²) of flowering plants, amphibians, reptiles, and mammals in the Asian region. Furthermore, the wetzone of Sri Lanka along with Western Ghats of India is declared as one of the 34 “biodiversity hotspots” of the world. Even though Sri Lanka’s biodiversity is thought to be very high, at present, only a small fraction of Sri Lanka’s biodiversity is known to science. For instance, higher plants and vertebrates are the only groups that have been studied in sufficient detail to date. Lower plants and invertebrates are largely neglected except for few selected groups such as butterflies, dragonflies, land snails, and algae. However, vertebrates make up only about 2% of all the species described to date while insects alone make up about 54%. Even the vertebrates and for that matter higher plants are not completely listed as during the last two decade alone large number of new species of vertebrates have been described. There is no doubt that large number of insect species are awaiting to be discovered in Sri Lanka. It will be rather unfortunate if some of these organisms would perish even before we discover them. Sri Lanka has taken a lead among the Asian countries in assessing conservation status of species at a national level, which is mandatory requirement for conservation priority setting and planning. Yet we have failed to follow up on the red listing process, which has resulted in many species being driven more towards extinction. Sri Lanka has taken many steps over the years to conserve its rich biodiversity. The most important among these include establishment of a network of protected areas that makes up about 30% of Sri Lanka’s land extent. However, many of these protected areas have not been inventorised and most of the protected areas do not have clear management objectives or management plans. Therefore, these protected areas are not managed as efficiently as they should be and as a result they have failed to accrue the benefits to the nation. Even though Sri Lanka ranks second in Asia with respect to percentage of land being managed as protected areas, much of its biodiversity inhabits areas outside the protected area network and many of these species are in conflict with man which has been identified as an emerging conservation issue in Sri Lanka. Thus, if we are to conserve Sri Lanka’s rich biodiversity there are number of things that need to be addressed immediately. These include, *inter alia*, inventorying the species and habitats, managing the protected areas in more efficient manner and finding lasting solutions to human-wildlife conflicts. Also, we need a paradigm shift in the way we utilise land as the current land use approach is quite detrimental to achieving conservation objectives of the nation.

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