

EVALUATION OF WILDLIFE HABITATS IN THE VICTORIA - RANDENIGALA - RANTAMBE SANCTUARY USING LIFE-FORM AND HABITAT MODELS

K B Ranawana, C N B Bambaradeniya and M P B Meegaskumbura

Department of Zoology,
University of Peradeniya.

A suitable habitat evaluation method is an important tool for wildlife managers to manipulate wildlife diversity, to predict how proposed habitat changes will effect different wildlife communities, as well as to determine the quantity and quality of available habitats for a particular species. A simple method of habitat evaluation is the use of life-form and habitat models (Anderson & Gutzwiller, 1994). During this process, all species of animals found in a given area are placed in distinct life-form categories, based on their predominant habitat use patterns for feeding and reproduction. Once the life-form table is made, more detailed data on habitat use is presented in habitat tables for individual species under each life-form category. By adding the number of habitats used by each species for reproduction and breeding, versatility score (V) can be obtained. Species with a high versatility score are the least sensitive to habitat manipulation. This would also enable wildlife managers to examine the impact of habitat loss/modification and list the species affected. This method was applied to evaluate the native vertebrates and their habitats in the VRR sanctuary. A total of 252 native vertebrates recorded were placed under 22 distinct life-form categories. These species were further assessed according to their major habitat utilisation patterns. Six major aquatic habitats and nine major terrestrial habitats were identified. Based on the versatility score of each species, they were grouped into three sensitivity categories for habitat manipulation; most sensitive, moderately sensitive and least sensitive. The most widely used habitat of fauna were recognised, based on the life forms and habitat models. This simple method could be adopted to evaluate the faunal habitats in all protected areas of Sri Lanka.