

BOOK REVIEWS

has been presented and the easily affordable price, this book belongs on the shelves of all those who have interest not only in the Western Ghats, but in any of the wonders of nature.

MEWA SINGH*
MRIDULA SINGH

*Department of Psychology,
Maharaja's College,
University of Mysore,
Manasagangothri,
Mysore 560 006, India
*e-mail: msingh@psychology.uni-
mysore.ac.in*



Biodiversity of Ranthambhore Tiger Reserve, Rajasthan. V. Singh and A. K. Shrivastava. Scientific Publishers (India), Jodhpur. 2007. 415 pp. Price: Rs 2750.

This is an excellent compilation on the Ranthambhor Tiger Reserve, covering detailed floral and faunal diversity with exhaustive literature review. The book deals with 539 species of higher plants and 361 vertebrate animal species along with detailed information of topography, geology, climatic conditions, soil and water, which are also important to determine the composition of floral and faunal diversity and socio-economic aspects of inhabitants.

The Ranthambhore National Park sustains a healthy tiger population and populations of other threatened taxa like panther, marsh crocodiles, hyena, wolf, caracal, jungle cat, sloth bears, sambar, etc. and avian fauna and other wildlife, besides rich plant diversity. In fact, it is a gene-pool for posterity and an ecological island of the Indo-Malayan realm. The biodiversity of such a globally known Tiger Reserve has not been studied so far in detail. As such, the authorities involved in the conservation of the Reserve

and the tigers in particular, have failed to formulate strategies in a scientific way due to lack of data. Keeping the above in view, the present study was undertaken.

One of the major contributions of this book is that for the first time, detailed taxonomic information of floral and faunal (vertebrates) diversity has been documented systematically, which has filled the vital gap in the available ecological information for the Reserve. Factors posing a threat to biodiversity have been discussed and threatened taxa have been identified and classified according to the IUCN criteria. The authors have also assessed the biosperspective value for the Reserve and documented the existing interaction between flora and fauna with their interdependency. They have supplemented the book with appropriate figures, photographs, tables, charts, maps, etc. For easy determination of taxa, keys have been provided from family to species level. The faunal wealth of the Reserve has been documented with help from the Zoological Survey of India, Jodhpur, published literature and forest authorities and officials of the Reserve. About 361 species belonging to 261 genera under 94 families (vertebrates) have been enumerated. The fauna has been classified up to infra-specific level. Valid zoological names have been adopted and their local and/or English names have been provided. Besides identification of threatened fauna and their categorization according to the IUCN criteria, the factors responsible for threat have also been identified and discussed. The authors have scientifically illustrated the flow of energy in the Reserve, which will play a vital role in the study of migration or depletion of fauna from the Reserve. The nomenclature has been updated along with important synonyms relevant to the flora of India and Rajasthan. Each species is described with diagnostic description based on the authors' observations covering phenological and ecological data. Local as well as botanical names provided in the book make it for useful a grass root-level worker, wildlife manager as well as expert ecologists and biologists.

One of the authors, V. Singh has served the Botanical Survey of India, Jodhpur for 32 years in different capacities. He is a noted taxonomist and has published many books and monographs, which are recognized world over. The other author, A. K. Shrivastava is a young field scien-

tist involved in herbal formulation with SRISTI, Ahmedabad.

This is for the first time that a book comes out with details of biodiversity of the Ranthambhore Tiger Reserve and has documented all the biotic and abiotic components which are vital and also gives an in-depth understanding of the ecological importance in tiger conservation.

The book is highly recommended for policy makers, environmentalists, wildlife managers, botanists and researchers of biology, socio-economic and wildlife sciences. Being well written and easily readable, the book should also appeal to naturalists, ecotourists and lay readers.

ANIL KUMAR CHHANGANI

*Department of Zoology,
JNV University,
Jodhpur 342 001, India
e-mail: changaniak@yahoo.com*

Visualizing the Structure of Science. B. Vargas-Quesada and F. de Moya-Aneón. Springer-Verlag, Berlin. 2007. 312 pp. Price: US\$ 139.00.

Visualization of information in the field of documentation was suggested over 60 years ago by Vannevar Bush in his famous essay 'As we may think', in *The Atlantic Monthly*, and put into practice by Eugene Garfield in his 1964 essay on the use of citation data in writing the history of science. Since then it has been used to 'uncover' and divulge the essence and structure of science. Henry Small, a colleague of Garfield at the Institute for Scientific Information, and Belver Griffith, Drexel University, wrote two seminal papers on the structure of scientific literature in 1974, based on cocitation analysis by Small. A decade later Small and Garfield published another seminal paper on the 'Geography of science' and 'Disciplinary and national mapping'. Garfield was among the earliest to recognize the value of mapping in tracing the evolution of interdisciplinary areas of research, such as bioinformatics and nanotechnology. He talked about 'research fronts' (resulting from information fluxes among disciplines) as distinct from disciplines, and used metaphorical