Record Nr. UNINA9910760290803321 Autore Mandal Mrinmay Titolo Geo-Spatial Analysis of Forest Landscape for Wildlife Management / / Mrinmay Mandal and Nilanjana Das Chatterjee Cham, Switzerland:,: Springer,, [2023] Pubbl/distr/stampa ©2023 **ISBN** 3-031-33606-2 Edizione [First edition.] Descrizione fisica 1 online resource (191 pages) Collana GIScience and Geo-Environmental Modelling Series Disciplina 910.5 Soggetti Forests and forestry - Remote sensing Landscape ecology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. 1. Landscape Background Study Area and Wildlife History -- 2. Nota di contenuto Conceptual Framework of Landscape Spatial Character and Ecological Interaction -- 3. Quantification of Forest Landscape Pattern for Habitat Quality Assessment -- 4. Quality Assessments Through Analysis of Forest Habitat Configuration and Composition -- 5. Assessment of Habitat Structural Connectivity and Corridors from Ecological Point of View -- 6. Species Specific Habitat Quality Assessment – Asian Elephant (Elephas Maximus) -- 7. Effective Landscape Management Methods to Improve Ecological Quality of Forest Habitat: Case Studies in the Fragmented Habitats -- 8. Landscape Management Methods to Enhance Habitat Quality for Wild Life Conservation in General And Elephants in Specific. Sommario/riassunto This book presents research on landscape ecology and the relationship between humans and wildlife. It helps readers understand how ecological patterns and processes are interconnected. This research illustrates and proposes (practicable) management strategies toward

long-term ecological restoration and mitigation of consequences of conflict. Increasing wildlife activities in localities and forest fringes are an alarming issue. Ecological processes like movement, colonization, extinction and conflict issues depend on the landscape and ecological activities, the movement for example of migratory elephants and their colonization not only affects society but the wildlife and biodiversity

too. Strategic management measures can contribute to enriching the biodiversity, habitat quality as well as landscape, while minimizing human-wildlife conflicts. This book describes landscape ecological patterns and processes, habitat dominancy, habitat dependency, suitability, connectivity and corridor selection. To synthesize these patterns and processes, several ecological indices are used. Use of geo-spatial techniques improves future management strategies for similar circumstances, especially, related to forest regeneration and forest restoration. This book provides a concise overview to a wide range of readers including postgraduate students, researcher, academics, landscape planners, decision makers and even local populations. The techniques and management strategies described should help planners to improve forest management, by implementing quality enhancement programs such as plantation area selection and corridor selection.