1. Record Nr. UNINA9910404249103321 Autore Sakio Hitoshi Titolo Long-term ecosystem changes in riparian forests / / editor, Hitoshi Sakio Pubbl/distr/stampa Singapore, : Springer Nature, 2020 Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020 **ISBN** 981-15-3009-2 Edizione [1st edition 2020.] Descrizione fisica 1 online resource (VIII, 234 p. 173 illus., 65 illus. in color.) Collana Ecological Research Monographs, , 2191-0707 Disciplina 577 Soggetti Forest ecology Riparian forests Ecologia forestal Zones humides Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Part I. Introduction -- Chapter 1. The Ooyamazawa Riparian Forest: Nota di contenuto Introduction and Overview -- Part II. Life History and Regeneration Processes of Riparian Woody Species.-Chapter 2. Fraxinus platypoda --Chapter 3. Pterocarya rhoifolia -- Chapter 4. Cercidiphyllum japonicum -- Chapter 5. Acer Tree Species -- Part III. Diversity and Coexistence in Riparian Forests -- Chapter 6. Diversity of Herbaceous Plants in the Ooyamazawa Riparian Forest -- Chapter 7. Coexistence of Tree Canopy Species -- Part IV. Ecosystem Changes in Riparian Forests -- Chapter 8. Changes in Forest Floor Vegetation -- Chapter 9. Temporal Changes in Browsing Damage by Sika Deer in a Natural Riparian Forest in Central Japan -- Chapter 10. Characteristics and Temporal Trends of a Ground Beetle (Coleoptera: Carabidae) Community in Ooyamazawa Riparian Forest -- Chapter 11. Avifauna at Ooyamazawa: Decline of Birds that Forage in Bushy Understories -- Part V. Conclusion -- Chapter 12. General Conclusion. .

This open access book presents and analyzes the results of more than 30 years of long-term ecological research in riparian forest ecosystems with the aim of casting light on changes in the dynamics of riparian

Sommario/riassunto

forests over time. The research, focusing on the Ooyamazawa riparian forest, one of the remaining old-growth forests in Japan, has yielded a number of interesting outcomes. First, it shows that large-scale disturbances afford various trees opportunities for regeneration and are thus the driving force for the coexistence of canopy trees in riparian forests. Second, it identifies changes in reproductive patterns, highlighting that seed production has in fact quantitatively increased over the past two decades. Third, it describes the decline in forest floor vegetation caused by deer grazing and reveals how this decline has affected bird and insect populations. The book illustrates the interconnectedness of phenomena within an ecosystem and the resultant potential for cascade effects and also stresses the need for long-term ecological studies of climate change impacts on forests. It will be of interest to both professionals and academics in the field of forest science.