1.	Record Nr.	UNINA9910739403303321
	Titolo	Treetops at risk : challenges of global canopy ecology and conservation // Margaret Lowman, Soubadra Devy, T. Ganesh, editors
	Pubbl/distr/stampa	New York, : Springer, 2013
	ISBN	1-4614-7161-3
	Edizione	[1st ed. 2013.]
	Descrizione fisica	1 online resource (xviii, 444 pages) : illustrations (some color)
	Collana	Gale eBooks
	Altri autori (Persone)	LowmanMargaret DevySoubadra GaneshT
	Disciplina	577.3
	Soggetti	Sustainable biodiversity Biodiversity conservation Endangered ecosystems
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references.
	Nota di contenuto	FORWARD PART I EMERGING ISSUES 1. The Role of Scientific Conferences to Foster Conservation Solution for Global Forests 2. Greening the Planet? 3. Comparative Canopy Biology and the Structure of Ecosystems 4. Forest Canopies as Earth's Support Systems: Priorities for Research and Conservation 5. Emerging Threats to Tropical Forests 6. Rethinking the Role of Tropical Forest Science in Forest Conservation and Management 7. REDD: How can scientists change the political jungle? 8. Narrowing global species estimates PART II CLIMATE CHANGE 9. Tropical cyclones and forest dynamics under a changing climate: what are the long-term implications for tropical forest canopies in the cyclone belt 10. Canopies and Climate Change 11. Church Forest Status and Carbon Sequestration in Northern Ethiopa 12. A novel approach to simulate climate change impacts on vascular epiphytes: case study in Taiwan 13. Sensitivity and threat in high-elevation rainforests: outcomes and consequences of the IBISCA- Queensland Project 14. A mature foreset canopy in a CO2-rich future - an experiment at the Swiss Canopy Crane research site 15. Shock value: are lianas natural lightning rods? 16. Potential impacts of global changes on epiphytic

bryophytes in subtropical montane moist evergreen broad-leaved forests, SW China 17. 'Canopy-less' monitoring of biodiversity and climate change: signs of a leaky roof PART III NEW APPROACHES 18. Mesoscale Exploration and Conservation of Tropical Canopies in a Changing Climate 19. Why do sloths poop on the ground? 20. Birds of the "canopy": historical perspective, current trends and future directions 21. Functional roles of lianas in the forest canopy 22. Islands in a sea of foliage: mistletoes as discrete components of forest canopies 23. Non-vascular epiphytes: functions and risks at the tree canopy 24. Canopy texture analysis for large-scale assessments of tropical forest stand structure and biomass 25. Changing tropical forest dynamics and their effects on canopy geometry and tropical forest dynamics and their effects on canopy geometry and tropical forest biodiversity 26. Reproductive Biology and Genetics of Some Dominant Canopy and Understorey Dominant Tree Species of Sri Lanka: Implications for Conservation Management in a Fragmented Landscape 27. The importance of flowers for beetle biodiversity and abundance 28. Assessing canopy processes at large landscape scales in the Western Ghats using remote sensing 29. Ontogeny of Herbivory on Leaves in a Tropical Rainforest in Madagascar 30. Do Water Bears Climb Trees too? 31. From leaf litter to canopy: non-invasive and reliable sampling in a tropical rainforest PART IV EDUCATION AND OUTREACH 32. Win-Win for Scientists Who Lead Citizen Science Canopy Research Expeditions 33. In the Canopy with Wheel Chairs: a model for teaching field biology 34. Modeling Insect outbreaks in Forest Canopies Integration of Virtual Simulations with Hands-on Ecology for Undergraduates 35. Canopy Capture 36. Kids can save Forests Forest Canopy Tourism- analyzing a Flagship Attraction in the Ecotourism Arena from a Political Ecology Perspective PART V ECOSYSTEM, SERVICES AND SUSTAINABILITY 38. Ancient Coast
Treetops at Risk brings together the world's foremost experts on forest canopies, and summarizes their views on the current and future status of forests. Forest canopies not only support high terrestrial biodiversity but also represent a critical interface between atmosphere and the earth. They provide goods and services to support humans, and represent important energy production centers for the planet. Millions of people depend upon forest canopies for their livelihoods, and millions more depend upon future sustainable use of forest resources. The canopy also serves as a hook for education outreach and conservation, inspiring ecotourism and recreation. Despite these critical services provided by forest canopies, very little dedicated research in the treetops was initiated until as recently as the late 1970s when single rope techniques were adapted for use in the canopy. Subsequently, an array of canopy access tools was designed that have opened up this "eighth continent" for global exploration and discovery. In 2009, the fifth International Canopy Conference

Sommario/riassunto

was held in Bangalore, India, representing the first time that canopy researchers had convened in a developing country. Not only did this conference jumpstart canopy initiatives in India, but it fostered a broader approach to critical canopy issues facing many emerging countries where forest resources are seriously in decline. Despite the global efforts of hundreds of forest scientists over the past 3 decades, forests are degrading at an accelerated rate and canopy biodiversity is increasingly threatened by human activities. Given these trends, new and innovative approaches must be taken. This volume summarizes the issue of "treetops at risk" and assembles a global authorship to examine past accomplishments and future initiatives critical in forest conservation.