

1. Record Nr.	UNINA9910337921703321
Titolo	Atlas of Ecosystem Services : Drivers, Risks, and Societal Responses / / edited by Matthias Schröter, Aletta Bonn, Stefan Klotz, Ralf Seppelt, Cornelia Baessler
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-319-96229-9
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (xxx, 414 pages)
Disciplina	333.7
Soggetti	Environmental management Biotic communities Applied ecology Environmental economics Urban ecology (Biology) Environmental Management Ecosystems Applied Ecology Environmental Economics Urban Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Forward -- Preface -- 1. The Risk to Ecosystems and Ecosystem Services: a Framework for the Ecosystem Service Atlas -- 2. The Ecosystem Service Concept: Linking Ecosystems and Human Wellbeing- 3. The Link Between Diversity, Ecosystem Functions and Ecosystem Services -- 4. Embracing Community Resilience in Ecosystem Management and Research -- 5. Risk and Uncertainty as Sources of Economic Value of Biodiversity and Ecosystem Services -- 6. Taking Social Responsibility in Using Ecosystem Services Concepts: Ethical Issues of Linking Ecosystems and Human Well-Being -- 7. Introduction to Part II: Drivers and Their Risks for Ecosystems, Their Functions, and Services -- 8. Scaling Sensitivity of Drivers -- 9. The Evidence for Genetic Diversity Effects on Ecosystem Services -- 10. Using Dynamic

Global Vegetation Models (DGVMs) for Projecting Ecosystem Services at Regional Scales -- 11. Remote Sensing Measurements of Forest Structure Types for Ecosystem Service Mapping -- 12. Mapping Land System Archetypes to Understand Drivers of Ecosystem Service Risks -- 13. Assessment of Soil Functions Affected by Soil Management -- 14. Mediterranean Wetlands: A Gradient from Natural Resilience to a Fragile Social-Ecosystem -- 15. Vulnerability of Ecosystem Services in Farmland Depends on Landscape Management -- 16. Provisioning Ecosystem Services at Risk: Pollination Benefits and Pollination Dependency of Cropping Systems at the Global Scale -- 17. Minimising Risks of Global Change by Enhancing Resilience of Pollinators in Agricultural Systems -- 18. Drivers of Risks for Biodiversity and Ecosystem Services: Biogas Plants Development in Germany -- 19. European Energy Governance Landscapes: Energy-Related Pressures on Ecosystem Services -- 20. Wind Power Deployment as a Stressor for Ecosystem Services: A Comparative Case Study from Germany and Sweden -- 21. Selected Trade-Offs and Risks Associated with Land Use Transitions in Central Germany -- 22. New EU-Level Scenarios on the Future of Ecosystem Services -- 23. International Trade and Global Flows of Ecosystem Services -- 24. The Rural-to-Urban Gradient and Ecosystem Services -- 25. How to Reconcile the Ecosystem Service of Regulating the Microclimate with Urban Planning Projects on Brownfields? The Case Study Bayerischer Bahnhof in Leipzig, Germany -- 26. Urban Green Infrastructure in Support of Ecosystem Services in a Highly Dynamic South American City: A Multi-Scale Assessment on Santiago de Chile -- 27. Climate Regulation by Diverse Urban Green Spaces: Risks and Opportunities Related to Climate and Land Use Change -- 28. Climate Change as Driver for Ecosystem Services Risk and Opportunities -- 29. Capacity of Ecosystems to Degrade Anthropogenic Chemicals -- 30. Impacts of Nitrogen Deposition on Forest Ecosystem Services and Biodiversity -- 31. Ecosystem Services from Inland Waters and Their Aquatic Ecosystems -- 32. Groundwater Ecosystems and Their Services: Current Status and Potential Risks -- 33. Drinking Water Quality at Risk: A European Perspective -- 34. Pesticide Effects on Stream Ecosystems -- 35. How Good Are Bad Species? -- 36. Alien Planktonic Species in the Marine Realm: What Do They Mean for Ecosystem Services Provision? -- 37. Invasion of the Wadden Sea by the Pacific Oyster (*Magallana gigas*): A Risk to Ecosystem Services? -- 38. Introduction to Part III: Trade-offs and Synergies Among Ecosystem Services -- 39. Trade-Offs and Synergies Between Biodiversity Conservation and Productivity in the Context of Increasing Demands on Landscapes -- 40. Climate Change Induced Carbon Competition: Bioenergy Versus Soil Organic Matter Reproduction -- 41. Removal of Agricultural Residues from Conventional Cropping Systems -- 42. Shrinking Cities and Ecosystem Services: Opportunities, Planning, Challenges, and Risk -- 43. Spatial Patterns of Ecosystem Service Bundles in Germany -- 44. Indicators of Ecosystem Services for Policy Makers in the Netherlands -- 45. The Montérégie Connection: Understanding How Ecosystems Can Provide Resilience to the Risk of Ecosystem Service Change -- 46. Synchronized Peak Rate Years of Global Resources Use Imply Critical Trade-Offs in Appropriation of Natural Resources and Ecosystem Services -- 47. Introduction to Part IV: Societal Responses -- 48. Governance Risks in Designing Policy Responses to Manage Ecosystem Services -- 49. Policy Mixes for Sustained Ecosystem Service Provision -- 50. Societal Response, Governance, and Managing Ecosystem Service Risks -- 51. Payments for Ecosystem Services: Private and Public Funding to Avoid Risks to Ecosystem Services -- 52. The TEEB Approach for

Demonstrating Societal Risks to Ecosystem Services: Taking Grassland Conservation as an Example -- 53. Urban Ecosystem Service Provision and Social-Environmental Justice in the City of Leipzig, Germany -- 54. Climate Change Impacts on Small Island States: Ecosystem Services Risks and Opportunities. 55. The Loss of Ecosystem Functions in Riverine Floodplains in Germany -- 56. Opportunity Maps for Sustainable Use of Natural Capital -- 57. Rice Ecosystem Services in South-East Asia: The LEGATO Project, Its Approaches and Main Results with a Focus on Biocontrol Services -- 58. Impacts of the EU's Common Agricultural Policy on Biodiversity and Ecosystem Services -- 59. Social Mapping of Perceived Ecosystem Service Risks: Some Thoughts from a Belgian Case Study -- 60. Ecosystem Services: Understanding Drivers, Opportunities, and Risks to Move Towards Sustainable Land Management and Governance.

Sommario/riassunto

Human well-being is significantly affected by the contributions provided by ecosystems, or ecosystem services. In this well-illustrated atlas, world-class experts identify and discuss key driving forces, trade-offs, and synergies of ecosystem services. Through interdisciplinary case studies varying across ecosystems and scales, this atlas narrows the knowledge gap between ecosystem services management and related fields of study. This atlas begins with conceptual background and proceeds to present drivers and their risks for ecosystems, their functions and services, and biodiversity. Trade-offs and synergies among ecosystem services and societal responses to the drivers and trade-offs are discussed. Sustainable land management and governance concepts are demonstrated throughout the atlas. Environmental scientists, practitioners and policy makers worldwide will appreciate the solutions and best practices identified throughout the chapters. Students of environmental sciences, socio-economics and landscape planning will find this atlas to be a valuable read, as well.
