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Nota di contenuto	Foreword -- 1 Societal Dependence on Soil's Ecosystem Services -- 2 Soils and Ecosystem Services -- 3 Ecosystem Carbon Sequestration -- 4 Food Security Through Better Soil Carbon Management -- 5 Soil Carbon and Water Security -- 6 Forests, Carbon Pool and Timber Production -- 7 Ecosystem Carbon and Soil Biodiversity -- 8 Ecosystem Services and the Global Carbon Cycle -- 9 Losses of Soil Carbon to the Atmosphere via Inland Surface Waters -- 10 Why Pests and Disease Regulation Should Concern Mankind -- 11 Natural Hazards Mitigation Services of Carbon-Rich Ecosystems -- 12 Safeguarding Regulating and Cultural Ecosystem Services: Degradation and Conservation Status -- 13 Human Appropriation of Net Primary Production, Stocks and Flows of Carbon, and Biodiversity -- 14 Soil Carbon and Biofuels -- 15 Land Degradation and Ecosystem Services -- 16 The Human Dimensions of Environmental Degradation and Ecosystem Services: Understanding and Solving the Commons Dilemma -- 17 Soil Organic Carbon, Soil Formation and Soil Fertility -- 18 Managing Soil Organic Carbon for Advancing Food Security and Strengthening Ecosystem Services in China.
Sommario/riassunto	This book describes comprehensively potential, co-benefits and drawbacks of carbon (C) sequestration for ecosystem services. Soil generates numerous ecosystem services for human wellbeing and

ecological functions. The services discussed include provisional (feed, food, timber, biofuel), regulating (carbon sequestration, pests, diseases), cultural, and supporting (soil formation, nutrient cycling) services. Recarbonization of the biosphere is a potential strategy to redistribute C among global pools, and to enhance ocean but most importantly land-based C sinks with possible feedback on soil-based ecosystem services. Land use and soil management can degrade soil quality, and either reduce quantity and quality of ecosystem services or lead to disservices and create large ecological footprint. Thus, trade-offs between carbon sequestration and ecosystem services must be considered when incentivizing land managers through payments for ecosystem services. Together with sustainable management of land-based C sinks for climate change adaptation and mitigation this will minimize the risks of recarbonization of the biosphere for ecological functions and human wellbeing.
