Record Nr. UNINA9910829298403321 Autore Lukac Martin **Titolo** Soil ecology in northern forests: a below ground view of a changing world / / Martin Lukac, Douglas L. Godbold [[electronic resource]] Cambridge:,: Cambridge University Press,, 2011 Pubbl/distr/stampa 1-107-21920-5 **ISBN** 1-139-06265-4 1-283-11131-4 9786613111319 1-139-07476-8 1-139-07701-5 1-139-06899-7 1-139-07929-8 0-511-97610-0 1-139-08157-8 Descrizione fisica 1 online resource (xi, 256 pages) : digital, PDF file(s) NAT038000 Classificazione Disciplina 634.9/5 Soggetti Forest soils - Northern Hemisphere Soil ecology - Northern Hemisphere Soil chemistry - Northern Hemisphere Forests and forestry - Northern Hemisphere Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Machine generated contents note: Preface; 1. Introduction; 2. Soil properties; 3. Forest soil development and classification; 4. Soil fungi; 5. Soil water; 6. Forest carbon cycle; 7. Nutrient cycling; 8. Northern forests in a high CO2 world; 9. Soil acidity and heavy metal pollution; 10. Nitrogen: 11. Soil functioning and climate change: References: Index. Forest soils form the foundation that underpins the existence of all Sommario/riassunto forests. This book encapsulates soil ecology and functioning in northern forests, focusing on the effects of human activity and climate change. The authors introduce the fundamental principles necessary

for studying forest soils, and explain the functioning and mutual influence of all parts of a forest soil ecosystem. A chapter is dedicated to each of soil acidity and heavy metal pollution, elevated carbon dioxide, nitrogen deposition and climate change, highlighting the most important anthropogenic factors influencing forest soil functioning and how these soils are likely to respond to environmental change. With its unique view of the functioning of the soils found under temperate and boreal forests in today's rapidly changing world, this book is of interest to anyone studying forestry and forest ecology in European, North American and North Asian contexts.