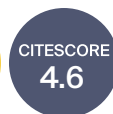




forests



Special Issue Reprint

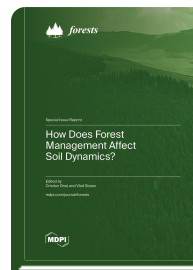
How Does Forest Management Affect Soil Dynamics?

www.mdpi.com/books/reprint/11966

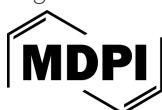
Edited by
Cristian Oneț
Vlad Stoian

ISBN 978-3-7258-5971-9 (Hardback)

ISBN 978-3-7258-5972-6 (PDF)



Forest ecosystems represent an important biodiversity resource worldwide and provide numerous important services. Their status is under constant change due to the applied management practices, which can exert both positive and negative effects. Forest soils have a complex microbiome and show variable activity dynamics in relation to soil structure, nutrient cycling, and organic matter content. There is a constant need for research oriented towards a better understanding of how these ecosystems respond to current management practices and to forecast their evolution and to optimize them to achieve resilience. Soil microbiomes occupy a key position within forest ecosystems, being responsible for nutrient cycling and vegetation maintenance. Microbial communities are suitable indicators for applied management and show rapid reactions to both biotic and abiotic factors. The ecosystem specificity of soil microbiome is an important trait to deepen understanding of their site-specific reaction to management procedures and enable the identification of new and more performant indicators that bring understanding of forest soils. Techniques like reforestation or regeneration imply great changes in soil microbiomes and change the diversity and assemblage of microbial communities. Clearing, thinning, or prescribed burning produce a different effect on the soil microbiome, along with climatic context and rainwater quality. Post-disturbance microbial dynamics are important in understanding the direction of ecosystem regeneration, the flow of biogeochemical cycles, and the assurance of growth conditions for tree species.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/11966

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.