BayCEER Kolloquium

Lectures in Ecology and Environmental Research

Summer 2017

UNIVERSITÄT BAYREUTH

Thursday
18.05.2017
12:00 in S21, GEO

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Soil Science, Organic Agricultural Sciences,
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Trafficability and compaction of forest soils and its consequences for forest ecosystems

Forest management relies strongly on machine operations and like in agricultural land use systems machine weight has significantly increased in recent years to make harvesting economically more efficient. In contrast to arable land, where tillage provides some option to repair topsoil compaction by loosening and levelling, this is not or only at high cost possible in forest management. A system of permanent skidding tracks is a compromise to protect at least a part of forest soils but rutting and the deterioration of physical properties of top and subsoil in and next to the tracks yet poses a serious and often long term problem for forest ecosystems.

During the presentation two aspects will be discussed: 1) the impact of compaction of skidding tracks on soil properties and the consequences for ecosystem functions and 2) mechanical properties and processes that control the trafficability of skidding tracks, which is not only of interest to prevent further negative environmental impact such as erosion, but is of great importance regarding safety issues and an economic forest management.negative environmental impact such as erosion but regarding safety issues and an economic forest management is of great importance.

Bayreuth Center of Ecology and Environmental Research

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The lectures are an inter-disciplinary platform for students, junior and senior scientists. Abstracts and further information: www.bayceer.uni-bayreuth.de/kolloquium/