Short Database Report

Database Temperate Deciduous and Coniferous Forests of the Solling Hills

Wolfgang Schmidt, Michaela Dölle & Andreas Parth

Abstract: The Database Temperate Deciduous and Coniferous Forests of the Solling Hills (GIVD ID EU-DE-017) offers forest vegetation relevés obtained from different research projects during four decades in the Solling Hills (Lower Saxony, Germany). It contains relevés mainly of pure beech stands (Fagus sylvatica, Luzulo-Fagetum) representing the potential natural vegetation on acidic soils of the Solling Hills. Many parts of the Solling Hills have been converted into spruce monoculture stands (Picea abies, which is not native to the region) during the last few centuries. Meanwhile a conversion of pure spruce stands into mixed stands dominated by beech is one of the main goals of silviculture in Germany. The relevés from pure beech and spruce stands as well as mixed beech-spruce stands offer good opportunities e.g. to compare composition and diversity of ground layer vegetation in relation to tree species composition or to evaluate the influence of different forest management activities to species diversity. Furthermore repeated relevés on permanent plots enable an evaluation of the data regarding the impact of eutrophication (including liming) and climate change on forest ecosystems.

Keywords: Fagus sylvatica; Germany; Picea abies.

GIVD Database ID: EU-DE-017

Database Temperate Deciduous and Coniferous Forests of the Solling Hills

Scope: data obtained from different research projects in the Solling Hills (Lower Saxony, Germany) during four decades
Status: completed and continuing
Period: 1966-2011
Database manager(s): Wolfgang Schmidt (wschmid1@gwdg.de); Michaela Dölle (mdoelle@gwdg.de); Andreas Parth (aparth@gwdg.de)
Owner: University of Göttingen
Web address: http://www.uni-goettingen.de/de/67090.html
Availability: free upon request
Online upload: no
Online search: no
Database format(s): MS Access
Export format(s): [NA]
Publication: [NA]
Plot type(s): normal plots; time series
Plot-size range: 100-400 m²
Non-overlapping plots: 2,000
Estimate of existing plots: [NA]
Completeness: [NA]
Total plot observations: 3,000
Number of sources: 1
Valid taxa: 300
Countries: DE: 100.0%
Forest: [NA] — Non-forest: [NA]
Guilds: all vascular plants: 100%; bryophytes (terricolous or aquatic): 100%
Environmental data: altitude: 100%; slope aspect: 100%; slope inclination: 100%; microrelief: 50%; soil pH: 50%; other soil attributes: 100%
Performance measure(s): cover: 100%; biomass: 20%
Geographic localisation: GPS coordinates (precision 25 m or less): 50%; point coordinates less precise than GPS, up to 1 km: 50%

Information as of 2012-07-12; further details and future updates available from http://www.givd.info/ID/EU-DE-017

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