

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		Last update: 2012-05-09	
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 m ²	
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%			
Sampling periods: 1960-1969: 20.0%; 1990-1999: 10.0%; 2000-2009: 60.0%; 2010-2019: 10.0%			
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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