

Post-Mining Vegetation Database Eastern Germany

Gerd Jünger, Annett Baasch, Anita Kirmer, Antje Lorenz & Sabine Tischew

Abstract: In eastern Germany, surface mining of lignite led to the destruction of entire landscapes and the interlinked ecosystems. After the German reunification in 1990, the majority of mining sites across eastern Germany were closed. During the last two decades, post-mining landscapes offered a unique chance to observe primary succession and have been subject to scientific research on spontaneous and assisted site recovery of heavily disturbed sites. Beginning in 1993, several research projects in surface-mined land have collected comprehensive vegetation data. The main objective was to gain knowledge about spatial and temporal processes of vegetation recovery and to derive guidelines for further restoration planning. Up to now, the post-mining vegetation database contains more than 5,000 vegetation relevés that have been compiled over the last two decades. The majority of the plots investigated are located in the post-mining landscapes of the Central German lignite mining district. Also, relevés were collected in the Lusatian mining region. Some of the plots were regularly revisited. Usually, the metadata of each relevé includes information on plot location (GPS coordinates) and abiotic conditions (exposition, pH and other soil attributes). This report describes the available content in the Post-Mining Vegetation Database Eastern Germany (GIVD ID EU-DE-023).

Keywords: post-mining landscape; primary succession; restoration; vegetation dynamics.

GIVD Database ID: EU-DE-023		Last update: 2012-07-10	
Post-Mining Vegetation Database Eastern Germany			
Scope: The post-mining vegetation database contains vegetation relevés that have been compiled over the last two decades in the post-mining landscapes of Eastern Germany.			
Status: completed and continuing		Period: 1994-2009	
Database manager(s): Gerd Jünger (g.juenger@loel.hs-anhalt.de); Annett Baasch (a.baasch@loel.hs-anhalt.de); Anita Kirmer (a.kirmer@loel.hs-anhalt.de)			
Owner: Anhalt University of Applied Sciences, Department for Nature Conservation and Landscape Planning, Working Group Prof. S. Tischew			
Web address: [NA]			
Availability: according to a specific agreement		Online upload: no	Online search: no
Database format(s): MS Access		Export format(s): MS Access, Excel, CSV file, MySQL	
Publication: [NA]			
Plot type(s): normal plots; time series		Plot-size range: 1-10,000 m ²	
Non-overlapping plots: 3,247	Estimate of existing plots: [NA]	Completeness: [NA]	
Total plot observations: 5,194	Number of sources: 3	Valid taxa: 842	
Countries: DE: 100.0%			
Forest: 29% — Non-forest: aquatic: 0; semi-aquatic: 11%; arctic-alpine: 0; natural: 0; semi-natural: 45%; anthropogenic: 8%			
Guilids: all vascular plants: 100%			
Environmental data: slope aspect: 51%; slope inclination: 51%; microrelief: 29%; soil depth: 98%; surface cover other than plants (open soil, litter, bare rock etc.): 86%; soil pH: 65%			
Performance measure(s): cover: 100%			
Geographic localisation: GPS coordinates (precision 25 m or less): 73%; small grid (not coarser than 10 km): 27%			
Sampling periods: 1990-1999: 55.0%; 2000-2009: 45.0%			
Information as of 2012-07-12; further details and future updates available from http://www.givd.info/ID/EU-DE-023			

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