

BioChangeMeadows – German meadows in the 1950s, 1990s and in 2008

Karsten Wesche & Benjamin Krause

Abstract: The BioChangeMeadows database (GIVD ID EU-DE-008) contains samples of moist and mesic meadows in northern and central Germany, and covers both historical (1950s and 1960s) and more recent (1990s, 2008) relevés. Analyses showed that plot-level diversity has decreased tremendously over time, which was largely irrespective of landscape context. Plant community composition shifted as well with decreasing numbers of insect-pollinated herbs and increasing numbers of grasses. Functional diversity showed similarly large declines as taxonomic diversity. Historical and current vegetation maps are also available and can be retrieved from the authors upon request.

Keywords: central Europe; diversity; historical comparison; map; phytosociology.

GIVD Database ID: EU-DE-009	Last update: 2012-05-09	
BioChangeMeadows		
Scope: Data base covers a number of case studies from moist meadow vegetation in northern Germany. The data are part of an ongoing research project hosted at the University of Göttingen (BioChange-Germany) where historical vegetation samples (and vegetation maps) from the 1950s/60s are compared to more recent surveys and the current condition. Both historical and present vegetation maps are available on request (ArcView format)		
Status: completed and continuing	Period: 1939-2008	
Database manager(s): Karsten Wesche (karsten.wesche@senckenberg.de), Benjamin Krause (bkrause@gwdg.de)		
Owner: [NA]		
Web address: [NA]		
Availability: free upon request	Online upload: no	Online search: no
Database format(s): TURBOVEG	Export format(s): [NA]	
Publication: Wesche, K., Krause, B., Culmsee, H. & Leuschner, C. 2009. Veränderungen in der Flächen-Ausdehnung und Artenzusammensetzung des Feuchtgrünlandes in Norddeutschland seit den 1950er Jahren. Berichte der Reinhold-Tüxen-Gesellschaft 21: 196-210.		
Plot type(s): normal plots	Plot-size range: 15-25 m ²	
Non-overlapping plots: 1,092	Estimate of existing plots: [NA]	Completeness: [NA]
Total plot observations: 1,092	Number of sources: [NA]	Valid taxa: 250
Countries: DE: 100.0%		
Forest: [NA] — Non-forest: [NA]		
Guilds: all vascular plants: 100%		
Environmental data: altitude: 100%; slope aspect: 20%; slope inclination: 20%		
Performance measure(s): cover: 100%		
Geographic localisation: GPS coordinates (precision 25 m or less): 60%; political units or only on a coarser scale (>10 km): 40%		
Sampling periods: 1930-1939: 2.0%; 1940-1949: 3.0%; 1950-1959: 30.0%; 1960-1969: 25.0%; 2000-2009: 40.0%		
Information as of 2012-07-12; further details and future updates available from http://www.givd.info/ID/EU-DE-009		

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