

Database of German North Sea Salt Marshes – vegetation and elevation

Sigrid Suchrow, Martin Stock & Kai Jensen

Abstract: The Database of German North Sea Salt Marshes (GIVD ID EU-DE-030) comprises 2,691 1m²-plots from German North Sea salt marshes, tracing back to the project “Thematic Mapping and Sensitivity Study of Mudflat Areas in the German Wadden Sea”. Between 1987 and 1991, plots along 121 transects covering the mainland coast of Schleswig-Holstein were investigated for their vascular plant species composition (species presence and percent cover) as well as structural and spatial variables like grazing management, position and elevation in relation to mean high tide. Frequent vegetation-types were *Spartinetum anglicae*, *Puccinellietum maritimae* and *Festucetum rubrae*, and the most frequent species were *Puccinellia maritima*, *Salicornia europaea* agg., *Spergularia media*, *Glaux maritima* and *Festuca rubra*. This consistent data set allowed and still aims at determining spatial and geographical differences regarding species diversity, dominance structure and functional traits in relation to driving environmental variables. Our data provide a baseline for future studies of possible changes in biodiversity, vegetation composition and species distribution pattern caused e.g. by invasive plant species, conservation management or sea level rise, which may in turn further improve future salt marsh management.

Keywords: biodiversity; conservation; management; ecological amplitude; invasive plant species; Wadden Sea.

GIVD Database ID: EU-DE-030		Last update: 2012-07-15	
Database of German North Sea Salt Marshes – Vegetation and Elevation			
Scope: The data set comprises 2,691 1m ² -plots from salt marshes along the German mainland North Sea coast. Between 1987 and 1991, the plots were investigated (along 121 transects) for their species composition and structural parameters.			
Status: completed and continuing		Period: 1987-1989	
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Owner: at present: Sigrid Suchrow, later on: Martin Stock for the Schleswig-Holstein Agency for Coastal Defence, National Park and Marine Conservation – National Park Authority			
Web address: [NA]			
Availability: after blocking period		Online upload: no	Online search: no
Database format(s): Excel		Export format(s): Excel, PDF, CSV file	
Publication: Bernem, K.H. van, M. Grotjahn, J. Knüpling, A. Müller, L. Neugebohrn, G. Ramm, G. Sach & S. Suchrow (1992): Thematic Mapping and Sensitivity Study of Mudflat Areas in the German Wadden Sea. In: Dankers, M., C.J. Smit & M. Scholl [Eds.]: Proceedings of the 7th International Wadden Sea Symposium. Ameland, the Netherlands, 22-26 October 1990. Publication Series Netherlands Institute for Sea Research No. 20, 237-238, 1992.			
Plot type(s): normal plots		Plot-size range: 1-1 m ²	
Non-overlapping plots: 2,691	Estimate of existing plots: 2,691	Completeness: 100%	
Total plot observations: 2,691	Number of sources: [NA]	Valid taxa: 92	
Countries: DE: 100.0%			
Forest: 0% — Non-forest: aquatic: 0%; semi-aquatic: 100%; arctic-alpine: 0%; natural: 0%; semi-natural: 0%; anthropogenic: 0%			
Guilds: all vascular plants: 100%			
Environmental data: altitude: 100%; microrelief: 100%; surface cover other than plants (open soil, litter, bare rock etc.): 100%; land use categories: 100%			
Performance measure(s): cover: 100%			
Geographic localisation: GPS coordinates (precision 25 m or less): 16%			
Sampling periods: 1980-1989: 100.0%			
Information as of 2012-07-25; further details and future updates available from http://www.givd.info/ID/EU-DE-030			

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