Metadata

Restoration database UDE

General information

name of the dataset:

full name of the dataset: *Restoration database UDE*

type of dataset (more information): *others*

specify: *Restoration database*

data type: *point data/observation data*

short description of the dataset/summary:

Data collection of the Department of Aquatic Ecology, University of Duisburg-Essen based investigations of restored and paired degraded sample sections.

science keywords according to GCMD:

topic: *Biosphere, Terrestrial Hydrosphere*

keywords: *Restorated sites, macroinvertebrates, fishes, macrophytes, floodplain vegetation, carabid beetles*

ISO topic category according to ISO 19115:

Biota, Environment, Inland Waters

Technical and administrative specifications

data format:	*Access*
operating system:	*Win XP*
current access level:	*internal*
currently available through GBIF:	*no*
exchange planned:	*no*
update level:	*continously updated*
documentation:	
Do you plan to publish the data on the Freshwater Biodiversity data portal:	*no*
contact details:	
metadata contact person:	
first, last name:	*Kathrin Januschke*
email:	*kathrin.januschke@uni-due.de*
institution:	*Universtität Duisburg-Essen, Faculty of Biology, Aquatic Ecology*
address:	*Universitätsstrasse 5*
postal code, city:	*45141 Essen*
country	*Deutschland*
web address:	*http://www.uni-due.de/aquatic_ecology*
technical contact person:	
first, last name:	*Kathrin Januschke*
email:	*kathrin.januschke@uni-due.de*
scientific contact person:	
first, last name:	*Daniel Hering*
email:	*daniel.hering@uni-due.de*
comments:	*[Metadata were harvested from the WISER metadatabase (http://www.wiser.eu/results/meta-database/details.php?id1=103&id2=109) by the BioFresh team.]*

Intellectual property rights and citation

(if the database is already published):

dataset creator (data compiler):

contact name:	*Kathrin Januschke*
contact email:	*kathrin.januschke@uni-due.de*
contact institution:	*Department of Aquatic Ecology, University of Duisburg-Essen*

data contributors to/owners of this dataset:

	single
criteria for using the data in a publication/scientific analysis:	
	Other/Additional criteria
other/additional criteria:	*Compilation of several national restoration projects, licenses have to be given by project leaders.*

citation of this dataset:

title:	*http://www.wiser.eu - Water Bodies in Europe: Integrative Systems to assess Ecological status and Recovery (Version **).*
year:	*year of access*
version (if applicable):	*version number from website*

citation of the metadata:

General data specifications

regional coverage of the dataset:

scale of the dataset:	*national*
continents:	*Europe*

spatial extend (bounding coordinates):

southernmost latitude [°]:	*47.299098*
northernmost latitude [°]:	*54.940931*
westernmost longitude [°]:	*5.688965*
easternmost longitude [°]:	*15.189453*
minimum altitude:	*-4 metres*
maximum altitude:	*2962 metres*
countries:	*Europe: Germany*

Site specifications

coordinate system/grid data:	*latitude/longitude, format: DM*
datum (e.g. WGS84):	*WGS84*
site coding:	*numerical*
number of digits:	*3*
number of sites:	*100 - 1000*
exact number of sites:	*156*

Climate and environmental data

climate related data: *no data available*

environmental data:

available parameters per catchment: *catchment size*

available parameters per site: *catchment land use upstream of sampling site for some sections; based on CORINE landcover*

available parameters per site: *information on embankment (incl. information on modification) morphological surveys on cross sections*

available parameters per site: *information on channel form (incl. information on modification) morphological surveys on cross sections*

available parameters per site: *information on cross section (incl. information on modification) morphological surveys on cross sections*

available parameters per site: *altitude*

available parameters per site: *current velocity morphological surveys on cross sections; current classes*

available parameters per site: *maximum depth morphological surveys on cross sections*

available parameters per site: *mean depth morphological surveys on cross sections*

available parameters per site: *wetted width morphological surveys on cross sections*

available parameters per site: *substrate composition morphological surveys on cross sections*

available parameters per site: *information on instream habitat (incl. information on modification) morphological surveys on cross sections*

physico-chemistry data: *nitrate, nitrite, ammonium, oxygen content, water temperature, pH, conductivity*

other physico-chemical parameters: *For some sections available*

stressors influencing the sites:

reference sites available: *no*

stressor	restored sites available	data before/after restoration available	stressor gradient available	comments
hydromorphological degradation	yes	yes		Biology (AQEM)

Biological data

biological data origin:

	general compilation
specify method:	*Compilation of several national restoration projects*
organism group addressed:	*terrestrial invertebrates (Carabidae), fish, macro-invertebrates, macrophytes, angiosperms (riparian vegetation)*

Sample specifications/sample resolution

terrestrial invertebrates:

sample information:

covered timeframe:	
year from - to:	*2005 - 2014*
historical data:	*no*
season:	*summer*
temporal resolution/frequency of sampling:	
	per year
time series data:	*yes*
comments:	*for some sections time series data*
taxonomic resolution:	*species*
percentage of species level data:	*100*
taxonomic coding:	
taxalist according to:	*Fauna Europaea*
sample specifications:	*semi-quantitative*
replicate samples:	*yes*
number of samples:	*166*
specification of method(s) used for sampling and sorting:	
	Combination of pitfall traps (vegetated zones) and hand sampling (unvegetated zones); pitfall traps (4 cm diameter, 8.5 cm depth, 200 ml volume), filled with 100 ml Renner-solution (Renner 1980) and a detergent to reduce surface tension
specific sample location (e.g. littoral, profundal, transect, shoreline, hyporheic zone, etc.):	
	6 to 8 pitfalls in vegetated zones, 6 to 8 handsamplings in unvegetated zones

fish:

sample information:

covered timeframe:	
year from - to:	*2003 - 2014*
historical data:	*no*
palaeo data:	*no*
season:	*summer, autumn*
temporal resolution/frequency of sampling:	
	per year
time series data:	*yes*
comments:	*For some sections time series data*
taxonomic resolution:	*species*
percentage of species level data:	*100*
taxonomic coding:	
taxalist according to:	*Diekmann et al. (2005)*
coding system:	*serially numbered according to fiBS*
sample specifications:	*qualitative*
number of samples:	*227*
specification of method(s) used for sampling and sorting:	
	Standardized electro fishing following the European Waterframework Directive, Diekmann et al. (2005)

macro-invertebrates:

sample information:
covered timeframe:
year from - to: *2000 - 2014*
historical data: *no*
palaeo data: *no*
season: *spring, summer*
temporal resolution/frequency of sampling:
per year
time series data: *yes*
comments: *For some sections time series data*
taxonomic resolution: *genus, species*
percentage of species level data: *80*
taxonomic coding:
taxalist according to: *Meier et al. (2006)*
coding system: *ID AQEM, DV*
sample specifications: *semi-quantitative*
replicate samples: *no*
number of samples: *313*
specification of method(s) used for sampling and sorting:
composite samples (e.g. MHS) following the European Waterframework Directive

macrophytes:

sample information:
covered timeframe:
year from - to: *2005 - 2014*
historical data: *no*
palaeo data: *no*
season: *summer*
temporal resolution/frequency of sampling:
per year
time series data: *yes*
comments: *For some sections time series data*
taxonomic resolution: *species*
percentage of species level data: *95*
taxonomic coding:
coding system: *serially numbered according to PHYLIB*
sample specifications: *semi-quantitative*
number of samples: *173*
specification of method(s) used for sampling and sorting:
PHYLIB supplemented by a method from Hesse

angiosperms:

sample information:
covered timeframe:
year from - to: *2005 - 2013*
season: *summer*
temporal resolution/frequency of sampling:
per year
time series data: *yes*
comments: *For some sections time series data*

taxonomic resolution:	*species, other*
other taxonomic levels:	*vegetation units*
percentage of species level data:	*99*
taxonomic coding:	
taxalist according to:	*Ellenberg (1996), Oberdorfer (1992)*
sample specifications:	*semi-quantitative*
replicate samples:	*yes*
number of samples:	*148*
specification of method(s) used for sampling and sorting:	*Transect-based grab-sampling: length of vegetation units was measured along 3 transects per site; for each vegetation unit present in a site, coverage of plant species was recorded at three sample plots (2x3m).*

Other specifications

GIS layers, shapes related to the dataset:
no data available

availability of photos: *yes*

availability of maps: *yes*

quality control procedures:

Were any quality control procedures applied to your dataset?
yes

comments: *For about 50% of the sites photos are available at University of Duisburg-Essen. For about 75% of the sites the database contains URL's to GoogleMaps, which show the exact location of the respective site.*