name of the dataset: UBA project database (Germany)

type of dataset (more information): species (taxonomic group) per site database including environmental information

short description of the dataset/summary:
collection of sites with both biological and abiotic information
- biological data covers all quality elements (macroinvertebrates, macrophytes, diatoms, other benthic algae, fish, and phytoplankton)
- abiotic data comprises hydromorphological info (Gewässerstrukturfassung, physico-chemical info, and information about landcovering in catchment area)

primary aim was to acquire complete site information (complete set of environmental data and data from all organism groups), but finally the datasets turned out to be quite fragmentary

science keywords according to GCMD:
topic: Biosphere, Terrestrial Hydrosphere
keywords: BQE, macroinvertebrates, macrophytes, diatoms, benthic algae, fish, phytoplankton, hydromorphological info

ISO topic category according to ISO 19115:
Biota, Environment, Inland Waters
Technical and administrative specifications

<table>
<thead>
<tr>
<th>data format:</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>operating system:</td>
<td>Win XP</td>
</tr>
<tr>
<td>current access level:</td>
<td>restricted access</td>
</tr>
<tr>
<td>others/details:</td>
<td>data access only after permission by data owner (federal states of Germany)</td>
</tr>
</tbody>
</table>

Currently available through **GBIF**: no

Exchange planned: no

Update level: continuously updated

**No documentation**

Do you plan to publish the data on the Freshwater Biodiversity data portal:

Contact details:

**Metadata contact person:**
- first, last name: Veronica Dahm
- email: veronica.dahm@uni-due.de
- institution: Universität Duisburg-Essen, Faculty of Biology, Aquatic Ecology
- address: Universitätsstrasse 5
- postal code, city: 45141 Essen
- country: Germany
- web address: http://www.uni-due.de/aquatic_ecology/

**Technical contact person:**
- first, last name: Veronica Dahm
- email: veronica.dahm@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=62&id2=30) by the BioFresh team.]
Intellectual property rights and citation

(if the database is already published):

dataset creator (data compiler):

data contributors to/owners of this dataset:
single

criteria for using the data in a publication/scientific analysis:
Other/Additional criteria

other/additional criteria:
In general, data owners do NOT grant the right to publish ecological status information on individual stations/sites (i.e. specific geographic locations). This applies to all uses.

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 [°]: 47.194687
  northernmost latitude [°]: 54.928307
  westernmost longitude [°]: 5.886719
  easternmost longitude [°]: 15.057617
  minimum altitude: -4 metres
  maximum altitude: 2962 metres
  countries: Europe: Germany
Site specifications

coordinate system/grid data:
  datum (e.g. WGS84): RW3567820
  site coding available: yes
  alphanumerical
  example: no fix number of digits; e.g.: 2031, ROTPAA_2, Wea

number of sites:
  >1000
  exact number of sites: 1750

comments: size typology based on catchment area: size of catchment area not available; numbers identified out of stream types; due to the fact that some stream types covering more than one size class total number of sites is more than 1750

numbers of sites per WFD criteria (geology): some types (430 sites) combine both calcareous and siliceous geology - classification of sites is not possible; 2 stream types (10 sites) can not be assigned to geology; rest of sites without info about stream type
## Climate and environmental data

**climate related data:**

**environmental data:**

**physico-chemistry data:**

- total P, ortho P, total dissolved P, nitrate, nitrite, total N, ammonium, hardness, alkalinity, water temperature, pH, conductivity, chlorophyll, colour, euphotic depth

**other physico-chemical parameters:** TOC (85%), DOC (30%), Mg (55%)

### Stressors influencing the sites:

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Restored Sites Available</th>
<th>Data Before/After Restoration Available</th>
<th>Stressor Gradient Available</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eutrophication</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>total phosphat, nitrate, ammonium</td>
</tr>
<tr>
<td>Hydromorphological</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>current diversity; substrate diversity; valuable structures in river bed and ban</td>
</tr>
<tr>
<td>Degradation</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>acid class (assessed by macro-invertebrates)</td>
</tr>
<tr>
<td>Acidification</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>saprobic index</td>
</tr>
<tr>
<td>Organic Pollution</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>areas with urbanization, industrialization and traffic; areas with agriculture a</td>
</tr>
<tr>
<td>General Degradation</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>
### Biological data

<table>
<thead>
<tr>
<th>biological data origin:</th>
<th>general compilation</th>
</tr>
</thead>
<tbody>
<tr>
<td>specify method:</td>
<td>regional authorities of federal states</td>
</tr>
<tr>
<td>organism group addressed:</td>
<td>fish, macro-invertebrates, phytoplankton, phytobenthos, (benthic) diatoms, macroalgae, macrophytes, angiosperms</td>
</tr>
</tbody>
</table>
Sample specifications/sample resolution

**fish:**

**sample information:**
covered timeframe:
year from - to: 2004 - 2007

**taxonomic resolution:**
species
percentage of species level data: 100

**coding system:**
DV Number

**sample specifications:**
quantitative (abundance data)
replicate samples: no
specification of method(s) used for sampling and sorting:
electro fishing

**macro-invertebrates:**

**sample information:**
covered timeframe:
year from - to: 2002 - 2007
season: spring, summer

taxonomic resolution:
genus, species
percentage of species level data: 54
comments:
taxonomic level: percentages refer to total taxa abundances

**coding system:**
ID AQEM, DV

**sample specifications:**
quantitative (abundance data)
specification of method(s) used for sampling and sorting:
composite samples (e.g. MHS)

**phytoplankton:**

**sample information:**
covered timeframe:
year from - to: 2004 - 2007

**taxonomic resolution:**
genus, species
percentage of species level data: 45
comments:
taxonomic level: percentages refer to total taxa abundances

**coding system:**
DV Number

**sample specifications:**
quantitative (abundance data)

**phytobenthos:**

**sample information:**
covered timeframe:
year from - to: 2003 - 2006

**taxonomic resolution:**
genus, species
percentage of species level data: 93
comments:
taxonomic level: percentages refer to both total taxa abundances and abundance classes (macrophytes and benthic diatoms/phytobenthos are treated together)

**coding system:**
DV Number
**Dataset:** UBA project database (Germany)

**Sample Specifications:**
- Quantitative (abundance data)
- No replicate samples

### (Benthic) Diatoms:
- **Sample Information:**
  - Covered timeframe: 2003 - 2006
  - Year from - to: 2003 - 2006
- **Taxonomic Resolution:**
  - Percentage of species level data: 93
  - Comments: Taxonomic level: percentages refer to both total taxa abundances and abundance classes (macrophytes and benthic diatoms/phytobenthos are treated together)
- **Taxonomic Coding:**
  - Coding system: DV Number
- **Sample Specifications:**
  - Quantitative (abundance data)
  - No replicate samples

### Macroalgae:
- **Sample Information:**
  - Year from - to: 2004 - 2007
- **Taxonomic Resolution:**
  - Percentage of species level data: 93
  - Comments: Taxonomic level: percentages refer to total taxa abundances
- **Taxonomic Coding:**
  - Coding system: DV Number
- **Sample Specifications:**
  - Semi-quantitative

### Macrophytes:
- **Sample Information:**
  - Year from - to: 2004 - 2007
- **Taxonomic Resolution:**
  - Percentage of species level data: 93
  - Comments: Taxonomic level: percentages refer to total taxa abundances
- **Taxonomic Coding:**
  - Coding system: DV Number
- **Sample Specifications:**
  - Semi-quantitative

### Angiosperms:
- **Sample Information:**
  - Year from - to: 2004 - 2007
- **Taxonomic Resolution:**
  - Percentage of species level data: 93
  - Comments: Taxonomic level: percentages refer to total taxa abundances
- **Taxonomic Coding:**
  - Coding system: DV Number
- **Sample Specifications:**
  - Semi-quantitative
Dataset: UBA project database (Germany)

Other specifications

availability of photos: no
availability of maps: no
quality control procedures: