General information

**name of the database:**
- full name of the database: Joint Danube Survey 2001, 2007
- database short name: JDS

**type of database** *(more information)*:
- species (taxonomic group) per site database including environmental information
- specify: environ. info existing, seperate db; availability?
- data type: point data/observation data
- short description of the database/summary:
  
  JDS was an initiative by the ICPDR to investigate the whole Danube river both with biological and chemical parameters. Goal: chemical status / biological status assessment; www.icpdr.org
  
  2001:
  94 sites along the Danube river incl. some larger tributaries at confluence benthic invertebrate data, qualitative sampling
  
  2007:
  96 sites benthic invertebrate data, airlift sampling

**science keywords according to GCMD:**
- topic: Biosphere, Biological Classification
- keywords: Danube, benthic invertebrates, ecological status assessment, WFD,

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

data format: Access
others/details: original data in special software ECOPROF

operating system: all Windows systems

data language: German
specify: some entries in English

current availability: internal, others/specify
others/details: availability from ICPDR to be checked

update level: completed
others/details: completed for 2001 and 2007; new data for 2013 planned

documentation:
type: others/specify
language: English
others/details: reports from both JDS events available at http://www.icpdr.org/jds; no report on raw data (?)

Do you plan to publish the data on the BioFresh data portal:

yes

media for data delivery: e-mail

contact details:

metadata contact person: Ilse Stubauer
first, last name: Ilse Stubauer
phone: +43 1 47654 5219
email: ilse.stubauer@boku.ac.at
institution: University of Natural Resources and Life Sciences
postal code, city: 1180 Vienna
province, state: Vienna
country: Austria
web address: http://www.boku.ac.at/hfa

technical contact person: Martin Seebacher
first, last name: Martin Seebacher
phone: +43 1 47654 5220
email: martin.seebacher@boku.ac.at

scientific contact person: Wolfram Graf
first, last name: Wolfram Graf
phone: +43 1 47654 5221
email: wolfram.graf@boku.ac.at

comments: useability of benthic invertebrate data will be discussed by BOKU-IHG with ICPDR, for all other data (specified in the following questionnaires) ICPDR has to be contacted directly
Intellectual property rights and citation

(if the database is already published):
database creator (data compiler): ICPDR
data contributors to/owners of this database: single
criteria for using the data in a publication/scientific analysis: Other/Additional criteria to be discussed with ICPDR
year: 2008
citation of the metadata: agreement for data availability (benthic invertebrates) will be discussed by BOKU with ICPDR

© BioFresh - Funded by the European Union under the 7th Framework Programme - contract no. 226874
General data specifications

regional coverage of the database:
  scale of the database:    regional
  continents:              Europe
  countries:               Europe: Austria, Bulgaria, Croatia, Germany, Hungary, Moldova, Romania,
                           Serbia, Slovakia, Ukraine
comments:                2001 also available, but method of sampling different
Site specifications

**coordinate system/grid data:**
- hydromorphological survey of total Danube river available: e.g. river width, river depth, discharge (mean/low/high), several parameters on channel form (alterations, substrate...), banks (slope, stabilisation, bank vegetation...), floodplains (land use, corridor width);

**other site classification parameters:**

**site coding available:**
- yes
- alphanumerical

**example:**
- R2096

**number of sites:**
- <100
- exact number of sites: 96

**comments:**
- coding system probably not unique for biology and hydromorph ??
Climate and environmental data

climate related data:
  available per: per site
  available parameters: mean discharge
  data source: ICPDR
  comments: probably some non-ticked parameters also available; ICPDR to be contacted

environmental data:
  available parameters per catchment: catchment size
    data source: ICPDR
  available parameters per catchment: catchment geology
    data source: ICPDR
  available parameters per catchment: catchment land cover/land use
    data source: ICPDR
  available parameters per site: presence of barriers/dams/reservoirs (fragmentation)
    data source: ICPDR
  available parameters per site: information on riparian vegetation (incl. information on modification)
  available parameters per site: information on embankment (incl. information on modification)
  available parameters per site: information on channel form (incl. information on modification)
  available parameters per site: river length
  available parameters per site: distance to mouth
  available parameters per site: slope
  available parameters per site: altitude
  available parameters per site: discharge
  available parameters per site: current velocity
  available parameters per site: maximum depth
  available parameters per site: mean depth
  available parameters per site: substrate composition
  comments: parameters above are available for stretches, but not or not always for the exact biological sampling sites; probably some of the non-ticked parameters are also available (not known by heart)

physico-chemistry data:
  total P, ortho P, nitrate, nitrite, ammonium, magnesium, alkalinity, oxygen content, water temperature, pH, conductivity, chlorophyll, Secci disc depth, suspended solids, substrate

other physico-chemical parameters:
  all parameters taken can be seen in Joint Danube Survey 2 - Final Scientific Report.- ICPDR, Vienna, 242 pp.
  examples of parameters taken:
    Pesticides; Bacteriological parameters: E.coli, Enterokocci; TC; Dissolved silicates(SiO2); EU WFD organic priority substances; (heavy) metals (Cd, Hg, Pb, Ni, As, Cr, Zn,....; Al, Mn, Fe)
  comments: availability of data to be discussed with ICPDR
<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></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hydromorphological degradation</td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>organic pollution</td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>toxic stress</td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>general degradation</td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hydrologic stress (e.g. impoundment, flow velocity reduction, hydroteaking, water abstraction, flow velocity increase)</td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>thermal stress</td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>socio-economic stress</td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>other stressors</td>
<td>no</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Biological data

<table>
<thead>
<tr>
<th>biological data origin:</th>
<th>from sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>specify project:</td>
<td>Joint Danube Survey</td>
</tr>
</tbody>
</table>

| organism group addressed: | fish, macro invertebrates (Mollusca, Crayfish, Ephemeroptera, Odonata, Plecoptera, Trichoptera, Chironomidae), zooplankton, phytoplankton, phytobenthos, macrophytes |

| comments: | in BOKU-database only benthic invertebrates; for other groups ICPDR to be contacted |
Sample specifications/sample resolution

**fish:**

**sample information:**
- covered timeframe:
  - year from: 2007
  - historical data: no
  - palaeo data: no
  - season: summer
  - temporal resolution/frequency of sampling:
    - time series data: no
  - taxonomic resolution: genus, species
  - taxonomic coding:
  - sample specifications:
    - comments: data availability to be checked with ICPDR

**macro invertebrates:**

**sample information:**
- covered timeframe:
  - year from: 2007
  - historical data: no
  - palaeo data: no
  - season: summer
  - temporal resolution/frequency of sampling:
    - airlift samples per site; mostly 6 airlifts, often taken 3 at each bank side
    - time series data: no
    - comments: 2001 also available, but different sampling method
  - taxonomic resolution: genus, species
  - taxonomic coding:
    - taxalist according to: Fauna Aquatica Austriaca
    - coding system: ID numbers
  - sample specifications:
    - replicate samples: yes
    - specification of method(s) used for sampling and sorting:
      - airlift sampling; 96 sites with 6 airlifts mostly
    - sample type (e.g. habitat specific samples, composite samples etc.):
      - river bottom sampled (whatever present)

**zooplankton:**

**sample information:**
- comments: data availability to be checked with ICPDR
  - taxonomic resolution:
  - taxonomic coding:
  - sample specifications:
    - comments: data availability to be checked with ICPDR

**phytoplankton:**
sample information:

phytobenthos:
sample information:

data availability to be checked with ICPDR

macrophytes:
sample information:

data availability to be checked with ICPDR
Other specifications

GIS layers, shapes related to the database:
- others (specify): several GIS infos available, ICPDR to be contacted on details

availability of photos: yes
availability of maps: yes

quality control procedures:
- Were any quality control procedures applied to your database? yes

quality control protocols and comments:
- ECOPROF has a taxa catalogue in the background; entries unified, no possibility to enter non-existing/non-certified taxa

comments:
- benthic invetebrate data in BOKU-database; for all other data ICPDR to be contacted