# Macroinvertebrate data of the Belgian River Meuse from 1998 to 2011

Adrien Latli 💿, Frédéric Chérot & Patrick Kestemont



Freshwater Metadata Journal DOI 10.15504/fmj.2018.34 ISSN 2312-6604 Published online: 2018-09-28



Published by University of Natural Resources and Life Sciences, Institute of Hydrobiology and Aquatic Ecosystem Management, BOKU - Vienna



Freshwater Metadata Journal 34: 1-5 http://freshwaterjournal.eu

# Macroinvertebrate data of the Belgian River Meuse from 1998 to 2011

Adrien Latli<sup>1</sup> (D), Frédéric Chérot<sup>2</sup> & Patrick Kestemont<sup>1</sup>

<sup>1</sup> University of Namur, Namur, Belgium; corresponding author: adrien.latli@unamur.be

<sup>2</sup> SPW Wallonie, Namur, Belgium

Please cite this paper as follows: Latli, A., Chérot, F. & Kestemont, P., 2018. Macroinvertebrate data of the Belgian River Meuse from 1998 to 2011. Freshwater Metadata Journal 34: 1-5. https://doi.org/10.15504/fmj.2018.34

Received: 2018-06-04 / Published: 2018-09-28

## Keywords

Meuse, macroinvertebates, river

#### Short description of the dataset/summary

Between 1998 and 2011 the SPW-DEMNA sampled macroinvertebrates in 3 reaches of the River Meuse (Hastière, Andenne, Lixhe) with a protocol adapted for deep rivers.

Environmental and fish data for the Meuse are also available as separate datasets.

## **General information**

| dataset entry ID:                    | SF_7   |
|--------------------------------------|--|
| name of the dataset:                 |  |
| full name of the dataset:            | Macroinvertebrate data of the Belgian River Meuse from 1998 to 2011            |
| dataset short name:                  | Meuse River macroinvertebrate dataset  |
| type of dataset:                     | species distribution data  |
| data type:                           | point data/observation data  |
| science keywords according to        | o <u>GCMD</u> :  |
| topic:                               | Terrestrial Hydrosphere  |
| ISO topic category according t       | o <u>ISO 19115</u> :   |
|                                      | Biota  |
| <b>INSPIRE</b> keywords according to | o <u>GEMET</u> :   |
|                                      | Environmental monitoring facilities, Species distribution                      |
| own science keywords:                | Macroinvertebrate, River Meuse, invasive, long term monitoring                 |
| related project:                     | Planctonic resources decrease, and habitat alterations, which consequences for |
|                                      | the functioning of communities? University of Namur                            |

#### funding:

We would like to thank the SPW (Belgium)for providing the data corresponding to their Meuse River monitoring programs. This work was funded by the University of Namur.

# Technical and administrative specifications

| data format:                       | Excel   |
|------------------------------------|---|
| operating system:                  | Win 7   |
| data language:                     | English   |
| current access level:              | web (public)  |
| currently available through GBIF:  | no  |
| exchange planned:                  | no  |
| data in data repository:           | no  |
| Do you plan to publish the data on | the Freshwater Biodiversity Data Portal:                          |
|                                    | already published through the Freshwater Biodiversity Data Portal |
| update level:                      | completed   |
| documentation:                     |   |
| type:                              | scientific paper  |
| language:                          | English   |
|                                    |   |
| contact details:                   |   |
| metadata contact person:           |   |
| first, last name:                  | Adrien Latli  |
| phone:                             | 081 72 42 87  |
| email:                             | adrien.latli@unamur.be  |
| institution:                       | University of Namur - URBE  |
| address:                           | Rue Bruxelles, 61   |
| postal code, city:                 | 5000 Namur  |
| country                            | Belgium   |
| technical contact person:          |   |
| first, last name:                  | Adrien Latli  |
| phone:                             | 081 72 42 87  |
| email:                             | adrien.latli@unamur.be  |
| scientific contact person:         |   |
| first, last name:                  | Patrick Kestemont   |
| phone:                             | +32 (0)81 72 43 63  |
| email:                             | patrick.kestemonti@unamur.be                                      |
|                                    |   |

# Intellectual property rights and citation

| dataset creator (data compiler):    |   |
|-------------------------------------|---|
| contact name:                       | Latli Adrien  |
| contact email:                      | adrien.latli@unamur.be; patrick.kestemont@unamur.be |
| contact institution:                | University of Namur                                 |
| data contributors to/owners of this | dataset:  |
|                                     | multiple  |
| number:                             | 2   |
| data contributor/owner 1:           |   |
| contact name:                       | Chérot Frédéric                                     |

| contact email:                 | frederic.cherot@spw.wallonie.be; dgarne@spw.wallonie.be   |
|--------------------------------|---|
| contact institute:             | SPW Wallonie  |
| criteria for using this part o | of the dataset:   |
|                                | The dataset is publicly available (data portal, data archive) and can be used without restrictions, but dataset creator/data contributors must be informed prior to publication. Data must be acknowledged and cited correctly. |
| data contributor/owner 2:      |   |
| contact name:                  | Adrien Latli  |
| contact email:                 | adrien.latli@unamur.be; patrick.kestemont@unamur.be   |
| contact institute:             | University of Namur   |
| criteria for using this part o | of the dataset:   |
|                                | The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.   |
| citation of this dataset:      |   |
| author(s):                     | Latli, A. & Chérot, F.  |
| title and journal (name, nur   | nber, pages):   |
|                                | Macroinvertebrate data of the Belgian River Meuse from 1998 to 2011.  |
| year:                          | 2017  |
| citation of the metadata:      |   |
| author(s):                     | Latli A., Chérot F. & Kestemont P.  |
| title and journal (name, nur   | nber, pages):   |
|                                | Macroinvertebrate data of the Belgian River Meuse from 1998 to 2011.  |
|                                | Freshwater Metadata Journal 34: 1-5   |
| year:                          | 2018  |
| doi:                           | https://doi.org/10.15504/fmj.2018.34  |
| dataset related references:    |   |
| reference 1:                   |   |
| author(s):                     | Latli, A., Descy, JP., Mondy, C., Floury, M., Viroux, L., Otjacques, W.,  |
|                                | Marescaux, J., Depiereux, E., Ovidio, M., Usseglio-Polatera, P. & Kestemont, P.   |
| title:                         | Long-term trends in trait structure of riverine communities facing predation risk increase and trophic resource decline. Ecological Applications 27(8): 2458-2474.  |
| year:                          | 2017  |
| doi:                           | <u>https://doi.org/10.1002/eap.1621</u>   |

# **General data specifications**

| regional coverage of the dataset:           |                 |  |
|---|-----------------|--|
| spatial extent of the dataset:              | regional        |  |
| continents:                                 | Europe          |  |
| spatial extent (bounding coordinates):      |                 |  |
| southernmost latitude [°]:                  | 50°9'           |  |
| northernmost latitude [°]:                  | 50°45'          |  |
| westernmost longitude [°]:                  | 4°49'           |  |
| easternmost longitude [°]:                  | 5°41'           |  |
| minimum altitude:                           | 49 metres       |  |
| maximum altitude:                           | 100 metres      |  |
| countries:                                  | Europe: Belgium |  |
| world climatic regions according to Köppen: |                 |  |
|   |                 |  |

Group C: temperate/mesothermal climates

| freshwater ecoregions of                       | the world (FEOW) according to <u>WWF</u> : |
|--|--|
|  | Europe: Central & Western Europe           |
| European ecoregions according to Illies (WFD): |  |
|  | Western Plains (ER13)                      |
| ecosystem type:                                | rivers                                     |
| covered timeframe:                             | 1998 - 2011                                |

# **Site specifications**

| coordinate system/grid data: | latitude/longitude, format: DMS<br>projected, UTM |
|------------------------------|---|
| datum (e.g. WGS84):          | WGS84   |
| grid data available:         | no  |
| site coding available:       | no  |
| number of sites:             | <100  |
| exact number of sites:       | 3   |

# **Biological data**

| biological data origin:   | from sampling,   |
|---------------------------|--|
|                           | European survey program  |
| organism group addressed: | macro-invertebrates (Mollusca, Crayfish, Ephemeroptera, Odonata, Plecoptera, |
|                           | Coleoptera, Trichoptera, Chironomidae)                                       |

# Sample resolution

| macro-invertebrates:         |  |
|------------------------------|--|
| taxonomic resolution:        |  |
| level:                       | family   |
| taxonomic coding:            |  |
| taxalist according to:       | AQEM/Star  |
| reference(s):                | Schmidt-Kloiber, A., Graf, W., Lorenz, A. & Moog, O. (2006): The                     |
|                              | AQEM/STAR taxalist - a pan-European macro-invertebrate ecological database           |
|                              | and taxa inventory. Hydrobiologia 566: 325-342.                                      |
| coding system:               | no coding used   |
| sample specifications:       |  |
| specification of method(s) u | ised for sampling and sorting:   |
|                              | Between 1998 and 2011 in 3 reaches of the River Meuse (Hastière, Andenne,            |
|                              | Lixhe) a protocol adapted for deep rivers and derived from the IBGA (1997) was       |
|                              | used. At these sites, during each sampling campaign, stones near the banks,          |
|                              | aquatic vegetation and littoral substrates were sampled with a hand net (500 $\mu m$ |
|                              | mesh size). The deeper part of the main channel was sampled from a boat using a      |
|                              | triangular dredge and three artificial substrates were deployed for one month.       |
|                              | Taxa were identified at the family level and abundances were determined with a       |
|                              | semi-quantitative estimation ("1" = 1 individual, "2" = 2, "3" = 3, "4" more than 3  |
|                              | and less than 10, $5"$ = more than 10 and less than 100, $6" > 99$ .                 |
| reference(s):                | IBGA: "Global Biological Index Adapted to large freshwater rivers", Gay              |
|                              | Environnement & Agence de l?Eau Rhône-Méditerranée-Corse, 1997.                      |

#### Other specifications

#### GIS layers, shape files related to the dataset: no data available availability of photos: no availability of maps: no quality control procedures: Were any quality control procedures applied to your dataset? yes quality control protocols and comments: We performed a number of systematic checks using the OpenRefine software.

#### Acknowledgements

The authors acknowledge the Belgian Science Policy (Belspo) for funding the SAFRED project (Saving freshwater biodiversity research data - 2015-2018) that allowed processing and publishing the data.

#### References

Latli, A., Descy, J.-P., Mondy, C., Floury, M., Viroux, L., Otjacques, W., Marescaux, J., Depiereux, E., Ovidio, M., Usseglio-Polatera, P. & Kestemont, P., 2017. Long-term trends in trait-structure of riverine communities facing predation risk increase and trophic resource decline. Ecological Applications 27(8): 2458-2474. 2017 https://doi.org/10.1002/eap.1621