Fish data of the Belgian River Meuse from 1989 to 2012

Adrien Latli, Michael Ovidio & Patrick Kestemont



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- ¹ University of Namur, Namur, Belgium; corresponding author: adrien.latli@unamur.be
- ² University of Liège, Liège, Belgium

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Keywords

Fish, Meuse, river, fish pass, electrofishing

Short description of the dataset/summary

During 23 years, 3 institutions sampled fish in the Belgian part of the River Meuse with two distincts methodologies.

Data were provided by the survey of fish passages in fish ladders at Tailfer (upstream Namur) and Lixhe (downstream Liège) over the 1989-2012 period (Matondo & Ovidio 2016). Fish were collected daily in a trap placed in the upper pool of the ladder when the migration peaks occurred, and twice a week outside the major migration period. All the fish species were identified and species abundances were estimated without taking into account the juveniles and the youngs-of-the-year. Annual fish abundances were expressed as monthly averages.

Data from Hastière, Andenne and Visé were provided by electrofishing from a boat along the banks in 1994, 2007, 2008, 2009 and 2010. Abundances were expressed as number of individuals per 100m² of river sampled.

Environmental and invertebrate data of the River Meuse are also available as separate datasets.

General information

dataset entry ID: SF_6

name of the dataset:

full name of the dataset: Fish data of the Belgian River Meuse from 1989 to 2012

dataset short name: Meuse River fish dataset

type of dataset: species distribution data
data type: point data/observation data

science keywords according to GCMD:

topic: Biosphere, Terrestrial Hydrosphere

ISO topic category according to ISO 19115:

Biota

INSPIRE keywords according to **GEMET**:

Environmental monitoring facilities, Habitats and biotopes

own science keywords: Fish pass survey, long term monitoring, roach decrease

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 and Liege.

Technical and administrative specifications

data format:

operating system:

data language:

current access level:

currently available through GBIF:

yes

exchange planned: yes 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: +32 (0)81 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

contact institution: patrick.kestemont@unamur.be

data contributors to/owners of this dataset:

multiple

number: 3

data contributor/owner 1:

contact name: Latli Adrien

contact email: adrien.latli@unamur.be; patrick.kestemont@unamur.be

contact institute: University of Namur

criteria for using this part of the dataset:

The dataset needs to be requested from dataset creator with specific conditions

of use.

data contributor/owner 2:

contact name: Ovidio Michael
contact email: M.Ovidio@ulg.ac.be
contact institute: University Liege

criteria for using this part of the dataset:

The dataset needs to be requested from dataset creator with specific conditions

of use.

data contributor/owner 3:

contact name: SPW-Direction de la chasse et la pêche contact email: DNF.DGRNE@mrw.wallonie.be contact institute: SPW-Direction de la chasse et la pêche

criteria for using this part of the dataset:

The dataset needs to be requested from dataset creator with specific conditions

of use.

citation of this dataset:

author(s): Latli, A., Ovidio, M., & Kestemont, P.

title and journal (name, number, pages):

Fish abundance evolution in the Belgian River Meuse from 1989 to 2012.

year: 2017

doi: https://doi.org/10.15468/vw7apf

citation of the metadata:

author(s): Latli A., Ovidio M. & Kestemont P.

title and journal (name, number, pages):

Fish data of the Belgian River Meuse from 1989 to 2012. Freshwater Metadata

Journal 33: 1-5

year: 2018

doi: https://doi.org/10.15504/fmj.2018.33

dataset related references:

reference 1:

author(s): Latli, A., Descy, J.-P., 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: 201°

doi: https://doi.org/10.1002/eap.1621

reference 2:

author(s): Matondo, B.N. & Ovidio, M.

title: Dynamics of upstream movements of the European eel Anguilla anguilla in an

inland area of the River Meuse over the last 20 years. Environmental Biology of

Fishes 99 (2-3): 223-235.

year: 2016

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 WWF:

Europe: Central & Western Europe

European ecoregions according to Illies (WFD):

Western Plains (ER13)

ecosystem type: rivers covered timeframe: 1989 - 2012

Site specifications

coordinate system/grid data: latitude/longitude, format: DMS

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,

Saumon Meuse and FEP-Meuse

organism group addressed: fish

Sample resolution

fish:

taxonomic resolution:

level: species percentage of species level data: 100

taxonomic coding:

taxalist according to: FishBase

reference(s): The information in the species table has been derived from more than 3,500

references such as the FAO Species Catalogues (e.g. Nielsen et al. 1999), the Indo-Pacific Fishes Series (e.g. Randall 2000), other taxonomic revisions, (e.g. Pietsch and Grobecker 1987) as well as faunal checklists such as Daget et al. (1984, 1990), Shao et al. (1992). Kottelat et al. (1993), Smith and Heemstra

(1995), Myers (1999) and Smith-Vaniz et al. (1999).

coding system: no coding used

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

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References

Latli Adrien, Descy Jean-Pierre, Mondy Cédric, Floury Mathieu, Viroux Laurent, Otjacques William, Marescaux Jonathan, Depiereux Eric, Ovidio Michael, Usseglio-Polatera Philippe & Kestemont Patrick, 2017. Long-term trends in trait-structure of riverine communities facing predation risk increase and trophic resource decline. Ecological Applications 27(8): 2458-2474. https://doi.org/10.1002/eap.1621

Matondo, B.N. & Ovidio, M., 2016. Dynamics of upstream movements of the European eel Anguilla anguilla in an inland area of the River Meuse over the last 20 years. Environmental Biology of Fishes 99 (2-3): 223-235. https://doi.org/10.1007/s10641-016-0469-x