

# Database of bomb crater pools in Tommelen nature reserve, Belgium

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### Keywords

bomb crater ponds, occurrences, environmental variables, Tommelen, Belgium

### Short description of the dataset/summary

The Tommelen dataset contains data from bomb crater pools (n=23) at Tommelen nature reserve (Hasselt, Belgium) (122 pools in an area of 12 ha). These ponds have been sampled annually from 2007 until 2012. A subset of the investigated ponds has been dredged in winter 2008.

This database comprises biodiversity data on aquatic macro-invertebrates and macrophytes, as well as information on major local environmental variables. Aquatic macro-invertebrates were sampled in 2008 and 2009. Macrophytes data are available for 2007, 2010 and 2012.

### General information

dataset entry ID:	SF_10
<b>name of the dataset:</b>	
full name of the dataset:	Tommelen bomb crater pools
dataset short name:	Tommelen
<b>type of dataset:</b>	species (taxonomic group) per site database including environmental information
data type:	point data/observation data
<b>science keywords according to GCMD:</b>	
topic:	Biosphere, Biological Classification, Land Surface, Terrestrial Hydrosphere

**ISO topic category according to [ISO 19115](#):**

Biota, Environment, Inland Waters

**INSPIRE keywords according to [GEMET](#):**

Habitats and biotopes, Protected sites  
own science keywords: bomb crater pools, occurrences, macro-invertebrates, macrophytes, local environmental conditions, Belgium

## Technical and administrative specifications

**data format:** Excel  
**operating system:** all Windows systems  
**data language:** English  
**current access level:** web (public)  
web address: <http://data.freshwaterbiodiversity.eu/ipt/resource?r=tommelen>  
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: internal description

**contact details:**

metadata contact person:

first, last name: Pieter Lemmens  
email: pieter.lemmens@kuleuweb.be  
institution: KU Leuven  
address: Ch. Deberiostraat 32  
postal code, city: 3000 Leuven  
country: Belgium

technical contact person:

first, last name: Pieter Lemmens  
email: pieter.lemmens@kuleuven.be

scientific contact person:

first, last name: Pieter Lemmens  
email: pieter.lemmens@kuleuven.be

## Intellectual property rights and citation

**dataset creator (data compiler):**

contact name: Pieter Lemmens  
contact email: pieter.lemmens@kuleuven.be  
contact institution: KU Leuven

**data contributors to/owners of this dataset:**

multiple  
number: 5

**data contributor/owner 1:**

contact name: Tom De Bie

contact email: tom.debie@kuleuven.be  
 contact institute: KU Leuven  
 criteria for using this part 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: Dirk Ercken  
 contact email:  
 contact institute: KU Leuven  
 criteria for using this part 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 3:**

contact name: Els De Roeck  
 contact email:  
 contact institute: KU Leuven  
 criteria for using this part 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 4:**

contact name: Leo Vanhecke  
 contact email: fd443644@skynet.be  
 contact institute: National Botanical Garden  
 criteria for using this part 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 5:**

contact name: Pieter Lemmens  
 contact email: pieter.lemmens@kuleuven.be  
 contact institute: KU Leuven  
 criteria for using this part 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.

**citation of this dataset:**

author(s): De Bie, T., Ercken, D., De Roeck, E., Vanhecke, L., Martens, K. & De Meester, L.  
 title and journal (name, number, pages): Database of bomb crater pools in Tommelen nature reserve (Hasselt, Belgium)  
 year: 2018  
 doi: <https://doi.org/10.15468/ywgc4j>

**citation of the metadata:**

author(s): Lemmens P., De Bie T., De Roeck E., Ercken D., Vanhecke L., Martens K. & De Meester L.  
 title and journal (name, number, pages): Database of bomb crater pools in Tommelen nature reserve, Belgium. Freshwater Metadata Journal 40: 1-6

year: 2018  
doi: <https://doi.org/10.15504/fmj.2018.40>

## General data specifications

### regional coverage of the dataset:

spatial extent of the dataset: regional  
continents: Europe

### spatial extent (bounding coordinates):

southernmost latitude [°]: 50.93  
easternmost longitude [°]: 5.31  
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: lakes/ponds

covered timeframe: 2007 - 2012

comments: The coordinates of the bounding box represent the coordinates of the center of the nature reserve.

## Site specifications

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

datum (e.g. WGS84): WGS84

grid data available: no

### ecosystem type classification:

lakes (classification mainly according to WFD):

depth typology based on mean depth

< 3 m

exact depth data available

### site coding:

site coding available: yes, numerical

number of digits: 2

example: 10

number of sites: <100

exact number of sites: 23

## Climate and environmental data

climate related data: no climate data available

### environmental data:

no environmental data per catchment available

available parameters per site: mean depth

data source: field measurements

substrate composition

	data source: field measurements
<b>physico-chemical data:</b>	total P, total N, alkalinity, oxygen content, water temperature, pH, conductivity, chlorophyll, suspended solids, substrate
<b>stressors influencing the sites:</b>	no stressor data available

## Biological data

<b>biological data origin:</b>	from sampling,
organism group addressed:	macro-invertebrates (Mollusca, Crayfish, Ephemeroptera, Odonata, Coleoptera, Trichoptera, Chironomidae), macrophytes

## Sample specifications/sample resolution

### macro-invertebrates:

#### sample information:

covered timeframe:	2007 - 2012
historical data:	no
palaeo data:	no
season:	summer
temporal resolution/frequency of sampling:	per year
time series data:	no

#### taxonomic resolution:

level:	genus, species
percentage of species level data:	70

#### taxonomic coding:

taxalist according to:	see De Bie et al. (2012)
reference(s):	De Bie, T., De Meester, L., Brendonck, L., Martens, K., Goddeeris, B., Ercken, D., Hampel, H., Denys, L., Vanhecke, L., Van der Gucht, K., Van Wichelen, J., Vyverman, W., Declerck, S.A.J., 2012. Body size and dispersal mode as key traits determining metacommunity structure of aquatic organisms. <i>Ecology Letters</i> 15(7): 740-747.

#### sample specifications:

type:	semi-quantitative
replicate samples:	no
number of samples:	23
specification of method(s) used for sampling and sorting:	see De Bie et al. (2012)
reference(s):	De Bie, T., De Meester, L., Brendonck, L., Martens, K., Goddeeris, B., Ercken, D., Hampel, H., Denys, L., Vanhecke, L., Van der Gucht, K., Van Wichelen, J., Vyverman, W., Declerck, S.A.J., 2012. Body size and dispersal mode as key traits determining metacommunity structure of aquatic organisms. <i>Ecology Letters</i> 15(7): 740-747.

### macrophytes:

#### sample information:

covered timeframe:	2007 - 2012
historical data:	no

palaeo data: no  
season: summer  
temporal resolution/frequency of sampling:  
per year  
time series data: no

**taxonomic resolution:**

level: species  
percentage of species level data: 100

**taxonomic coding:**

taxalist according to: see De Bie et al. (2012)  
reference(s): De Bie, T., De Meester, L., Brendonck, L., Martens, K., Goddeeris, B., Ercken, D., Hampel, H., Denys, L., Vanhecke, L., Van der Gucht, K., Van Wichelen, J., Vyverman, W., Declerck, S.A.J., 2012. Body size and dispersal mode as key traits determining metacommunity structure of aquatic organisms. *Ecology Letters* 15(7): 740-747.

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type: semi-quantitative  
replicate samples: no  
number of samples: 23  
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reference(s): De Bie, T., De Meester, L., Brendonck, L., Martens, K., Goddeeris, B., Ercken, D., Hampel, H., Denys, L., Vanhecke, L., Van der Gucht, K., Van Wichelen, J., Vyverman, W., Declerck, S.A.J., 2012. Body size and dispersal mode as key traits determining metacommunity structure of aquatic organisms. *Ecology Letters* 15(7): 740-747.

## 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:

Species names were checked using the GBIF species list.

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## References

De Bie, T., De Meester, L., Brendonck, L., Martens, K., Goddeeris, B., Ercken, D., Hampel, H., Denys, L., Vanhecke, L., Van der Gucht, K., Van Wichelen, J., Vyverman, W. & Declerck, S.A.J., 2012. Body size and dispersal mode as key traits determining metacommunity structure of aquatic organisms. *Ecology Letters* 15(7): 740-747.  
<https://doi.org/10.1111/j.1461-0248.2012.01794.x>