Metadata

Biodiversity data of gravel pit lakes in Northern Germany

General information

name of the dataset:

full name of the dataset: *Biodiversity data of gravel pit lakes in Northern Germany*

full name of the datast (original/national language): *Biodiversitätsdaten von Baggerseen in Norddeutschland*

dataset short name: *BAGGERSEE biodiversity data*

type of dataset (more information): *species distribution data*

data type: *point data/observation data*

short description of the dataset/summary:

This dataset contains information on species presence in and at lakes in Northern Germany. Most of the lakes are gravel pit lakes. All lakes that contain "fish data" only are natural lakes (N=6). Depending on lake and biological taxa, lakes were sampled several times. This dataset contains information on species presence from the first sampling event at each lake to be representative of a roughly equal sampling efforts between the lakes. The complete database with all sampling events is available via www.fred.igb-berlin.de (DOI: 10.18728/igb-fred-807.0).

short description of the dataset/summary (original/national language):

Dieser Datensatz enthält Informationen über das Vorkommen von Arten in und an Seen in Norddeutschland. Die meisten der Seen sind Baggerseen. Alle Seen, die nur "Fischdaten" enthalten, sind natürliche Seen (N=6). Je nach See und biologischen Taxa wurden die Seen mehrmals beprobt. Dieser Datensatz enthält Informationen über das Vorkommen von Arten aus der jeweils ersten Beprobung an jedem Gewässer, um einen ungefähr gleichen Beprobungsaufwand zwischen den Seen zu repräsentieren. Die vollständige Datenbank mit allen Beprobungsereignissen ist unter www.fred.igb-berlin.de verfügbar (DOI: 10.18728/igb-fred-807.0).

keywords according to GCMD:

topic: *Biosphere, Biological Classification, Terrestrial Hydrosphere*

ISO topic category according to ISO 19115:

Biota, Inland Waters

INSPIRE keywords according to GEMET:

Species distribution

own science keywords: *gravel pit lake; biodiversity; fish; crayfish; birds; amphibians; dragonflies; macroinvertebrates; macrophytes; riparian vegetation*

related project: *BAGGERSEE*

funding: *Federal Ministry of Education and Research (BMBF): Research for Sustainability (FONA). Federal Agency for Nature Conservation with funding from the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) as part of the Federal Biological Diversity Programme (funding codes 01LC1320A, 01LC1320B*

and 3514685C20).

Technical and administrative specifications

data format:	*Excel*
operating system:	*all operating systems*
data language:	*English*
current access level:	*web (public)*
web address:	https://www.gbif.org/dataset/3580c8a0-33eb-40ac-b172-995854622428
currently available through GBIF:	*yes*
exchange planned:	*no*
data in data repository:	*yes*
specify repository:	*IGB FRED (fred.igb-berlin.de; DOI: 10.18728/igb-fred-807.0)*
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*
others/details:	*see dataset related references*
language:	*English*

contact details:

metadata contact person:	
first, last name:	*Sven Matern*
phone:	*+49 (0)33201 406 69*
email:	*sven.matern@ifb-potsdam.de*
institution:	*Potsdam Institute of Inland Fisheries (IfB)*
address:	*Im Königswald 2*
postal code, city:	*14469 Potsdam*
country:	*Germany*
web address:	https://www.ifb-potsdam.de
technical contact person:	
first, last name:	*Robert Nikolaus*
email:	*nikolaus.klosterdorf@outlook.de*
scientific contact person:	
first, last name:	*Robert Arlinghaus*
phone:	*+49 (0)30 64181 653*
email:	*robert.arlinghaus@igb-berlin.de*
comments:	*Sven Matern and Robert Nikolaus are both metadata and technical contact persons.*

Intellectual property rights and citation

(if the dataset is already published):

dataset creator (data compiler):

contact name:	*Sven Matern*
contact email:	*sven.matern@ifb-potsdam.de*
contact institution:	*Potsdam Institute of Inland Fisheries (IfB)*

data contributors to/owners of this dataset:

	multiple
number:	*11*

provider 1:

provider institute:	*Potsdam Institute of Inland Fisheries (IfB)*
contact name:	*Sven Matern*
contact position:	*Potsdam Institute of Inland Fisheries (IfB)*
contact email:	*sven.matern@ifb-potsdam.de*
criteria for using the data in a publication/scientific analysis:	
	The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.

provider 2:

provider institute:	
contact name:	*Robert Nikolaus*
contact position:	
contact email:	*nikolaus.klosterdorf@outlook.de*
criteria for using the data in a publication/scientific analysis:	
	The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.

provider 3:

provider institute:	*Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB)*
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contact position:	*Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB)*
contact email:	*malwina.schafft@igb-berlin.de*
criteria for using the data in a publication/scientific analysis:	
	The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.

provider 4:

provider institute:	*Hochschule Bremen, City University of Applied Sciences*
contact name:	*Thomas Klefoth*
contact position:	*Hochschule Bremen, City University of Applied Sciences*
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criteria for using the data in a publication/scientific analysis:	
	The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.

provider 5:

provider institute:	*Angler Association of Lower Saxony in Hannover*
contact name:	*Matthias Emmrich*
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contact email:	*m.emmrich@av-nds.de*
criteria for using the data in a publication/scientific analysis:	
	The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.

provider 6:

provider institute: *Angler Association of Lower Saxony in Hannover*
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contact email: *a.maday@av-nds.de*
criteria for using the data in a publication/scientific analysis:
The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.

provider 7:
provider institute: *Fischereiforschungsstelle Baden-Württemberg*
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contact position: *Fischereiforschungsstelle Baden-Württemberg*
contact email: *steffen.bader@lazbw.bwl.de*
criteria for using the data in a publication/scientific analysis:
The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.

provider 8:
provider institute: *Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB)*
contact name: *Christian Wolter*
contact position: *Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB)*
contact email: *christian.wolter@igb-berlin.de*
criteria for using the data in a publication/scientific analysis:
The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.

provider 9:
provider institute: *University of Duisburg-Essen*
contact name: *Daniel Hering*
contact position: *University of Duisburg-Essen*
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criteria for using the data in a publication/scientific analysis:
The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.

provider 10:
provider institute: *University of Koblenz-Landau, Institute for Environmental Sciences*
contact name: *Alessandro Manfrin*
contact position: *University of Koblenz-Landau, Institute for Environmental Sciences*
contact email: *manfrin@uni-landau.de*
criteria for using the data in a publication/scientific analysis:
The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.

provider 11:
provider institute: *Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB)*
contact name: *Robert Arlinghaus*
contact position: *Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB)*
contact email: *robert.arlinghaus@igb-berlin.de*
criteria for using the data in a publication/scientific analysis:
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): *Matern, S., Nikolaus, R., Schafft, M., Klefoth, T., Emmrich, M., Maday, A., Bader, S., Wolter, C., Hering, D., Manfrin, A. & Arlinghaus, R.*

title and journal (name, number, pages): *Biodiversity data of gravel pit lakes in Northern Germany. Leibniz Institute of Freshwater Ecology and Inland Fisheries. Occurrence dataset https://doi.org/10.15468/snyq2x accessed via GBIF.org.*

year: *2023*

doi (if applicable): https://doi.org/doi.org/10.15468/snyq2x

citation of the metadata:

author(s): *Matern, S., Nikolaus, R., Schafft, M., Klefoth, T., Emmrich, M., Maday, A., Bader, S., Wolter, C., Hering, D., Manfrin, A. & Arlinghaus, R.*

title and journal (name, number, pages): *Metadata for biodiversity data of gravel pit lakes in Northern Germany. Freshwater Metadata Journal 0: 0-0*

year: *0000*

doi (if applicable): https://doi.org/10.15504/fmj.0000.0

General data specifications

regional coverage of the dataset:

spatial extent of the dataset:	*regional*
continents:	*Europe*

spatial extent (bounding coordinates):

southernmost latitude [°]:	*52.01*
northernmost latitude [°]:	*53.62*
westernmost longitude [°]:	*7.24*
easternmost longitude [°]:	*13.59*
minimum altitude:	*-0.9 metres*
maximum altitude:	*110.5 metres*
countries:	*Europe: Germany*

world climatic regions according to Köppen:

Group C: temperate/mesothermal climates

Group D: continental/microthermal climate

freshwater ecoregions of the world (FEOW) according to WWF:

Europe: Central & Western Europe

European ecoregions according to Illies (WFD):

Central Plains (ER14)

ecosystem type: *lakes/ponds*

covered timeframe:

year from:	*2016*
year to:	*2020*

Site specifications

coordinate system/grid data:	*latitude/longitude, format: DD*
datum (e.g. WGS84):	*WGS84*
grid data available:	*no*
site coding available:	*no*
number of sites:	*<100*
exact number of sites:	*95*

Biological data

biological data origin:	*from sampling,*
specify project:	*BAGGERSEE*
specify method:	
organism group addressed:	*water birds, amphibians, fish, macro-invertebrates (Mollusca, Crayfish, Ephemeroptera, Odonata, Coleoptera, Trichoptera, Chironomidae), macrophytes, angiosperms (riparian vegetation)*

Sample resolution

water birds:

taxonomic resolution:

percentage of species level data: *100*

comments: *includes all birds detected at sampling site*

taxonomic coding:

taxalist according to: *n/a*

citation: *Please contact authors for further information.*

sample specifications:

specification of method(s) used for sampling and sorting:

A description of the sampling methods can be found in the following publication:
Nikolaus, R., Schafft, M., Maday, A., Klefoth, T., Wolter, C. & Arlinghaus, R. Status of aquatic and riparian biodiversity in artificial lake ecosystems with and without management for recreational fisheries: Implications for conservation. Aquatic Conserv: Mar Freshw Ecosyst. 2021; 31: 153-172. https://doi.org/10.1002/aqc.3481

amphibians:

taxonomic resolution:

percentage of species level data: *65*

taxonomic coding:

taxalist according to: *n/a*

citation: *Please contact authors for further information.*

sample specifications:

specification of method(s) used for sampling and sorting:

A description of the sampling methods can be found in the following publication:
Nikolaus, R., Schafft, M., Maday, A., Klefoth, T., Wolter, C. & Arlinghaus, R. Status of aquatic and riparian biodiversity in artificial lake ecosystems with and without management for recreational fisheries: Implications for conservation. Aquatic Conserv: Mar Freshw Ecosyst. 2021; 31: 153-172. https://doi.org/10.1002/aqc.3481

fish:

taxonomic resolution:

percentage of species level data: *99*

taxonomic coding:

taxalist according to: *n/a*

citation: *Please contact authors for further information.*

sample specifications:

specification of method(s) used for sampling and sorting:

A description of the sampling methods can be found in the following publications:
Matern, S., Emmrich, M., Klefoth, T., Wolter, C., Nikolaus, R., Wegener, N. & Arlinghaus, R. Effect of recreational-fisheries management on fish biodiversity in gravel pit lakes, with contrasts to unmanaged lakes. J Fish Biol. 2019; 94: 865-881. https://doi.org/10.1111/jfb.13989
Matern, S., Klefoth, T., Wolter, C., Hussner, A., Simon, J. & Arlinghaus, R. Fish community composition in small lakes: The impact of lake genesis and

fisheries management. Freshw Biol. 2022; 67: 2130-2147. https://doi.org/10.1111/fwb.14001

macro-invertebrates:

taxonomic resolution:

percentage of species level data: *66*

taxonomic coding:

taxalist according to: *n/a*

citation: *Please contact authors for further information.*

sample specifications:

specification of method(s) used for sampling and sorting:

A description of the sampling methods can be found in the following publication:
Nikolaus, R., Schafft, M., Maday, A., Klefoth, T., Wolter, C. & Arlinghaus, R. Status of aquatic and riparian biodiversity in artificial lake ecosystems with and without management for recreational fisheries: Implications for conservation. Aquatic Conserv: Mar Freshw Ecosyst. 2021; 31: 153-172. https://doi.org/10.1002/aqc.3481

macrophytes:

taxonomic resolution:

other taxonomic levels: *subspecies*

percentage of species level data: *89*

taxonomic coding:

taxalist according to: *n/a*

citation: *Please contact authors for further information.*

sample specifications:

specification of method(s) used for sampling and sorting:

A description of the sampling methods can be found in the following publication:
Nikolaus, R., Schafft, M., Maday, A., Klefoth, T., Wolter, C. & Arlinghaus, R. Status of aquatic and riparian biodiversity in artificial lake ecosystems with and without management for recreational fisheries: Implications for conservation. Aquatic Conserv: Mar Freshw Ecosyst. 2021; 31: 153-172. https://doi.org/10.1002/aqc.3481

angiosperms:

taxonomic resolution:

percentage of species level data: *65*

taxonomic coding:

taxalist according to: *n/a*

citation: *Please contact authors for further information.*

sample specifications:

specification of method(s) used for sampling and sorting:

A description of the sampling methods can be found in the following publication:
Nikolaus, R., Schafft, M., Maday, A., Klefoth, T., Wolter, C. & Arlinghaus, R. Status of aquatic and riparian biodiversity in artificial lake ecosystems with and without management for recreational fisheries: Implications for conservation. Aquatic Conserv: Mar Freshw Ecosyst. 2021; 31: 153-172. https://doi.org/10.1002/aqc.3481

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:

Data were checked for correctness. Sometimes species determination was not possible and lowest taxonomic level was noted.