

# Metadata

# Ictioplata: a fish distribution database for the La Plata drainage basin



Exported from the Freshwater Biodiversity Data Portal, http://data.freshwaterbiodiversity.eu Visit the Freshwater Metadatabase, http://data.freshwaterbiodiversity.eu/metadb/about\_metadata

#### **General information**

name of the dataset:

full name of the dataset: Ictioplata: a fish distribution database for the La Plata drainage basin

dataset short name: Ictioplata

**type of dataset (**<u>more information</u>**):** species distribution data data type: species distribution data

short description of the dataset/summary:

The La Plata basin, including the Parana, Paraguay and Uruguay river drainages, is the second most important in South America with more than 3,000,000 km², providing natural resources to a population of 165 million people, including five countries. Because of its size and international configuration, no initiative has yet intended to compile the distribution of the fish fauna. The objective of the Ictioplata database is to fill this gap, offering the most complete possible scientific base to study fish distribution patterns of the La Plata basin. The database is built on a Geographic Information System (GIS) including data from different sources:

A. Information extracted from the literature (published articles, books, gray literature).

B. Data available from museums/collections and universities.C. Data extracted from online databases such as GBIF, FishNet, SpeciesLink and IABIN, among others.

The database already provides a comprehensive overview of the fish diversity and distribution in the "Rio de la Plata" drainage basin, with nearly 100.000 occurrence records from 12 data sources that all together regroup nearly 70 museum and university collections (see appendix), complemented with over 800 bibliographic references. These records range from 1829 to 2016 for over 1450 native and 24 exotic species.

At this stage (December 2019), the database is available upon request and will be available in early 2020 to download, along with futur updated versions, from the website www.freshwaterfishdata.earth.

keywords according to **GCMD**:

topic: Biosphere, Biological Classification

ISO topic category according to ISO 19115:

Biota, Environment, Inland Waters

**INSPIRE** keywords according to **GEMET**:

Species distribution

own science keywords: freshwater fish, species distribution, Rio de la Plata

funding:

Financial support was offered by the Laboratoire Evolution et Diversité Biologique is part of the French Laboratory of Excellence projects "LABEX TULIP" and "LABEX CEBA" (ANR-10-LABX-41, ANR-10-LABX-25-01) and the Museo de Ciencias Naturales "Antonio Scasso" (Argentina)

# **Technical and administrative specifications**

data format: others/specify others/details: PostgreSQL

**operating system:** all operating systems

data language: English current access level: web (public)

web address: www.freshwaterfishdata.earth

currently available through GBIF: no exchange planned: yes data in data repository: no

specify repository: A data portal is under construction (www.freshwaterfishdata.earth) and we

plan to also send it to GBIF and the Freshwater Biodiversity Data Portal

Do you plan to publish the data on the Freshwater Biodiversity Data Portal:

yes

update level: update planned

contact details:

metadata contact person:

first, last name: Céline Jézéquel email: celine.jezequel@ird.fr

institution: IRD

address: UMR EDB - Université Paul Sabatier, 118 route de Narbonne, bat 4R1

postal code, city: 31000 Toulouse

country France

technical contact person:

first, last name: Céline Jézéquel email: celine.jezequel@ird.fr

scientific contact person:

first, last name: Pablo Tedesco

email: pablo.tedesco@ird.fr

# Intellectual property rights and citation

(if the dataset is already published):

dataset creator (data compiler):

contact name: Pablo Tedesco
contact email: pablo.tedesco@ird.fr

contact institution: IRD data contributors to/owners of this dataset:

multiple

number:

provider 1:

provider institute: IRD

contact name: Pablo Tedesco
contact email: pablo.tedesco@ird.fr
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: IRD

contact name: Céline Jézéquel
contact email: celine.jezequel@ird.fr
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: Museo de Ciencias Naturales

contact name: Jorge Liotta

contact email: jorgerliotta@gmail.com 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: IRD

contact name: Remy Bigorne
contact email: remy.bigorne@ird.fr
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: IRD

contact name: Thierry Oberdorff
contact email: thierry.oberdorff@ird.fr
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): Jézéquel, C., Bigorne, R., Liotta, J., Oberdorff, T. & Tedesco, P.A.

title and journal (name, number, pages):

Ictioplata: a fish distribution database for the La Plata drainage basin.

http://www.freshwaterfishdata.earth

year: 2020

## citation of the metadata:

author(s): Jézéquel, C., Bigorne, R., Liotta, J., Oberdorff, T. & Tedesco, P.A.

title and journal (name, number, pages):

Metadata description of the Ictioplata database: a fish distribution database

for the La Plata drainage basin. Freshwater Metadata Journal 0: 0-0

year: 0000

doi (if applicable): <a href="https://doi.org/10.15504/fmj.0000.0">https://doi.org/10.15504/fmj.0000.0</a>

# **General data specifications**

#### regional coverage of the dataset:

spatial extent of the dataset: catchment continents: South America

#### spatial extent (bounding coordinates):

southernmost latitude [°]: -40 northernmost latitude [°]: -14 westernmost longitude [°]: -67 easternmost longitude [°]: -43

countries: South America: Argentina, Bolivia, Brazil, Paraguay, Uruguay

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

South America: Chaco, Lower Parana, Lower Uruguay, Paraguay, Upper

Parana, Upper Uruguay

ecosystem type: rivers, lakes/ponds, wetlands

coverarditimeframe: 1830 year to: 2016

# Site specifications

coordinate system/grid data: latitude/longitude

projected

datum (e.g. WGS84): WGS84

grid data available: no

site coding:

site coding available: yes

alphanumerical

number of digits: 7

example: IC00852
number of sites: >1000
exact number of sites: 7000

# **Biological data**

**biological data origin:** from sampling, specify project: general compilation,

specify method:

comments: The database is built on a Geographic Information System (GIS) including

data from different sources:

A. Information extracted from the literature (published articles, books, gray

literature).

B. Data available from museums/collections and universities.C. Data extracted from online databases such as GBIF, FishNet,

SpeciesLink and IABIN, among others.

organism group addressed: fish

# Sample resolution

fish:

#### taxonomic resolution:

percentage of species level data: 100

taxonomic coding:

taxalist according to: FishBase & California Academy of Sciences-Catalogue of Fishes

citation: Fricke, R., Eschmeyer, W. & Van der Laan, R. (2018). Catalog of Fishes:

Genera, Species, References.

http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcat

main.asp

Froese, R. & Pauly, D. (2018). FishBase. World Wide Web electronic

publication. www.fishbase.org

## sample specifications:

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

These are the fields contained in the database:

Field/Definition

ID ICTIO/Unique code of occurrence

Class/Name of the class Order/Name of the order Family/Name of the family

CDFB16 Unique code of the species in Fishbase

OGEN/Name of the genus OESP/Name of the species

Species/Complete name of the species TYPE/Type de species (holotype, etc...)

CAPDAY/Day of capture
CAPMONTH/Month of capture
CAPYEAR/Year of capture
COLLEC/Collecting person
IDENTI/Identification person

LTYPE/Type of length LMM/Length in mm

PROV/Organism providing the information

BIBLIO/Bibliographic reference

REF/Origine of the data

COLMUS/Code of the museum CDCOLLEC/Collection type code NBCOLLEC/Collection number

IDGBIF/GBIF identification

TRANSLOC/Exotic status of the species

OLOCALITY/Locality information of the capture

ISO3/Code ISO3

FKST/Unique site code OX\_dd/Longitude OY\_dd/Latitude

OHYNAM/Name of the hydrologic system

IDGEON/Geonames code OHYTYPE/Habitat type

HYINTER/Intermitency of the habitat

OBANAM/Name of the drainage basin

CD\_BV1/Principal subdrainge code

OS\_BV1/Principal subdrainge name

CD\_BV2/Secundary subdrainge code

OS\_BV2/Secundary subdrainge name

TYPDAT/ Data type (point or subdrainage)

scientific name/Species name in the original data source

DateUpdate/Date of last modification

## Other specifications

GIS layers, shape files related to the dataset:

species distribution

hydrological information (as HydroBASINS)

catchments, river-sub-basins

availability of photos: no availability of maps: yes

quality control procedures:

Were any quality control procedures applied to your dataset?

yes

quality control protocols and comments:

To avoid any duplication when integrating data from different sources, all duplicates are identified and excluded during import by either verifying unique identifiers for occurrences (or fields that should constitute unique identifiers when considered together; e.g. institute + collection + collection number) or based on sampling details in combination with the geographical coordinates of the data.

Where available, details on provenance, citation, along with a modification/"last updated" timestamp (e.g. only available for GBIF and SpeciesLink) are systematically documented for the retained records. In addition, during import, each record is systematically checked for reliability and consistency, using the FishBase Consortium database, and the California Academy of Science's Catalog of Fishes, as nomenclature authority files. During the process of building the database, a taxonomic checklist work is achieved to validate all species actually present in the La Plata drainage basin.