



Formation GBIF/BioVel

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**GBIF**  
**(Global Biodiversity Information Facility)**

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Twitter : @gbiffrance

# The Global Biodiversity Information Facility

## Objectif

La diffusion libre, gratuite et universelle, via Internet, de données scientifiques et d'informations relatives à la biodiversité



## Moyen

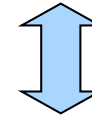
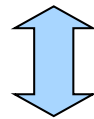
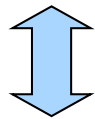
Créer des systèmes interopérables, formant ainsi un réseau distribué de bases de données scientifiques sur la biodiversité.



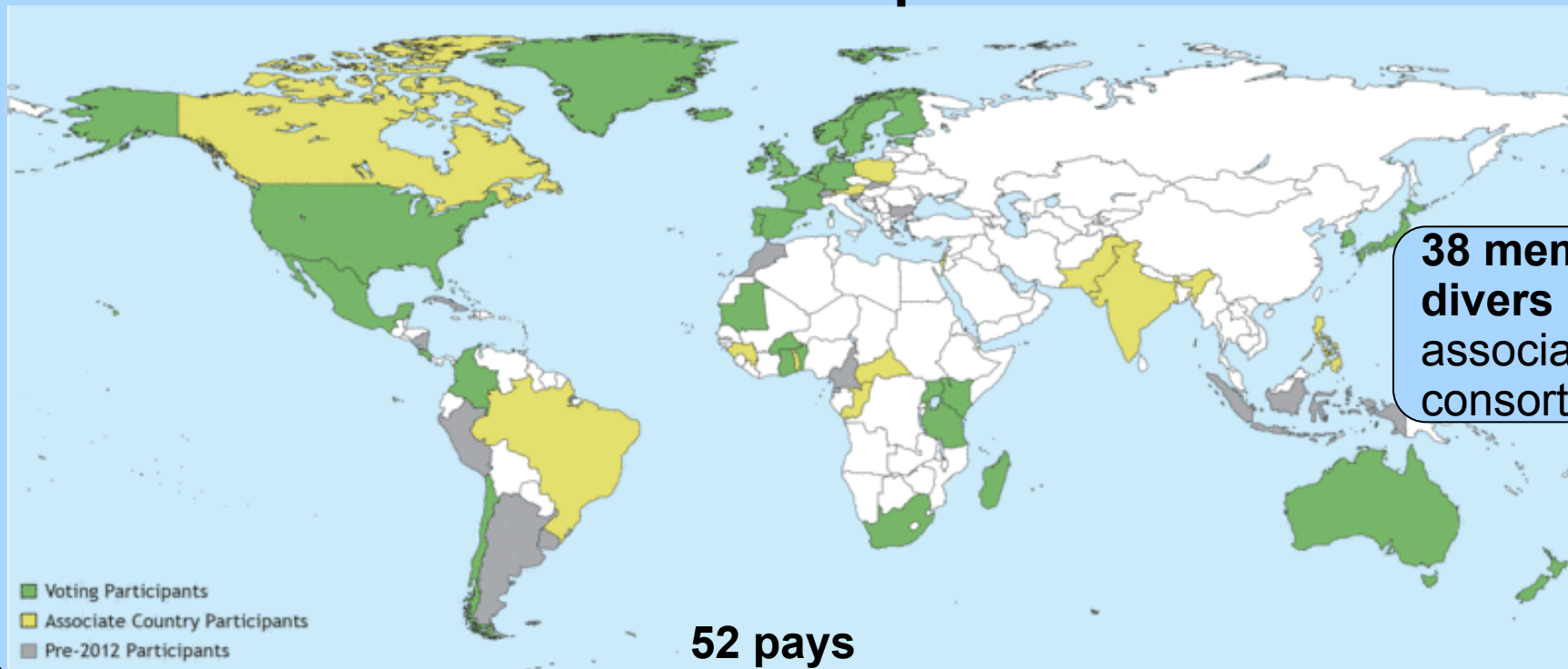
# Organisation du GBIF

**Governing Board**  
Comité exécutif  
comité pour le budget  
Comité des noeuds participants  
comité scientifique

**Secrétariat**  
Basé à  
Copenhague



## 90 Participants



**38 membres  
divers :**  
associations,  
consortiums, ...







[www.gbif.org](http://www.gbif.org)



**+ de 439 millions de données**  
**+ de 14 000 jeux de données**  
**Spécimens, observations, listes de noms**

The screenshot shows the GBIF homepage with a green map background. The main header includes the GBIF logo, the text 'Global Biodiversity Information Facility', and the tagline 'Free and open access to biodiversity data'. Navigation links for 'Data', 'News', 'Community', and 'About' are visible. A statistics bar displays: 439,087,003 OCCURRENCES, 1,454,695 SPECIES, 14,758 DATASETS, and 591 DATA PUBLISHERS. Below this, three columns describe the platform's goals: 'Sharing biodiversity data for re-use', 'Providing evidence for research and decisions', and 'Collaborating as a global community'. A search bar at the bottom is labeled 'Search news items and information pages...'. The footer includes 'Latest GBIF news' and a link to 'Go to GBIF Newsroom'.

GBIF

# Global Biodiversity Information Facility

Free and open access to biodiversity data

439,087,003 OCCURRENCES | 1,454,695 SPECIES | 14,758 DATASETS | 591 DATA PUBLISHERS

Sharing biodiversity data for re-use  
[Learn about GBIF](#)  
[Publish your data through GBIF](#)  
[Technical infrastructure](#)

Providing evidence for research and decisions  
[Using data through GBIF](#)  
[Enabling biodiversity science](#)  
[Supporting global targets](#)

Collaborating as a global community  
[Current Participants](#)  
[How GBIF is funded](#)  
[Enhancing capacity](#)

Search news items and information pages... [Search](#)

Latest GBIF news [Go to GBIF Newsroom](#)

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GBIF.ORG

Free and open access to biodiversity data

Login or Create a new account

Data ▾ News ▾ Community ▾ About ▾

News and articles

# GBIF Newsroom

News and events from around the GBIF community

Summary

News

Uses of data

Opportunities

Events

Feedback

## Featured uses of data accessed through GBIF

These are selected examples from the growing body of peer-reviewed research making use of GBIF-mediated data, including descriptions of what types of data were used and how they contributed to the study. Click on 'Related GBIF resources' at the bottom of each example page to see the types of filters available to access data through this portal.

You can find out more about using data through GBIF [here](#), and you can also access a [full list of papers citing use of GBIF](#), extracted from the [Mendeley GBIF Public Library](#).



### Designing marine protected areas off Mexico

Researchers look at methods to determine the ideal spacing between protected areas in the Gulf of California, ensuring connectivity based on the distances covered by larvae of fish species identified through GBIF.



### Shifting niches and invasive species control

Researchers use data available through GBIF to investigate how species can shift their ecological niches in alien environments – complicating the prediction of invasion risks.



### How important are rare species for ecosystems?

Research using records available through GBIF, in combination with other data, studies the role of rare and common species in the functioning of ecosystems.

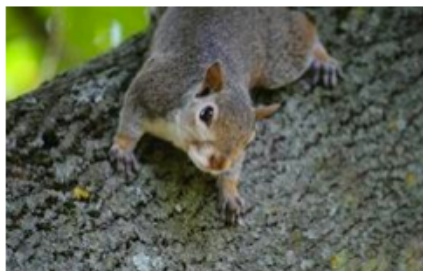




### Designing marine protected areas off Mexico

Researchers look at methods to determine the ideal spacing between protected areas in the Gulf of California, ensuring connectivity based on the distances covered by larvae of fish species identified through GBIF.

64 regional fish species identified



### Shifting niches and invasive species control

Researchers use data available through GBIF to investigate how species can shift their ecological niches in alien environments – complicating the prediction of invasion risks.

2997 records of presence used



### How important are rare species for ecosystems?

Research using records available through GBIF, in combination with other data, studies the role of rare and common species in the functioning of ecosystems.

Records of 662 species through GBIF



### Brazilian forest reserves in a changing climate

Study uses GBIF-mediated data to look into the effectiveness of current forest reserves in conserving 16 forest plant species under changing climate conditions.

Data on 16 forest plant species used



### Finding patterns in bee-plant relationships

Brazilian researchers use data published via GBIF to analyse the impact of climate on interactions between bees and the plants they pollinate.

Data from 32 publishers through GBIF



### Animal burrows are climate change refuges

A study using museum records accessed via GBIF highlights the importance of 'ecosystem engineers' in providing places of refuge in a warming climate.

32 museum records accessed via GBIF



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News and articles

# GBIF Newsroom

News and events from around the GBIF community

Summary

News

Uses of data

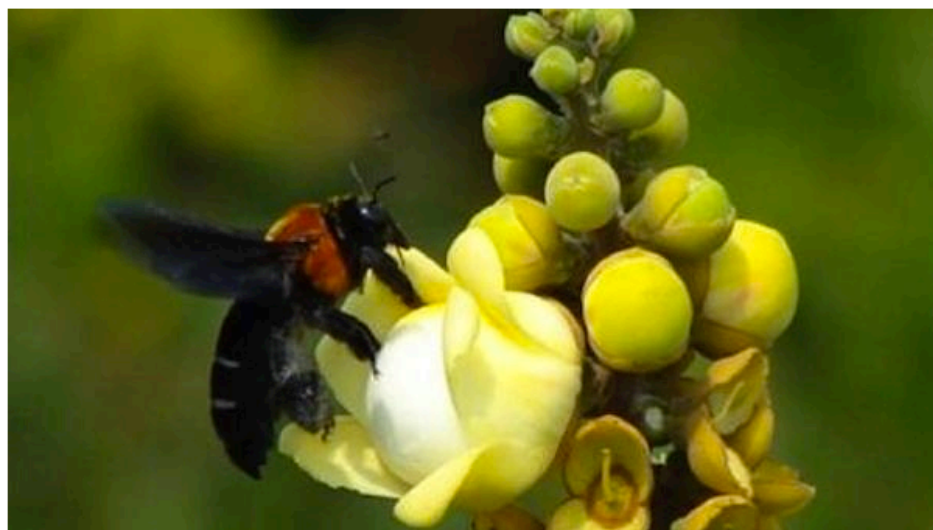
Opportunities

Events

Feedback

## FEATURED DATA USE

### Finding patterns in bee-plant relationships



This study from a team of Brazilian researchers looked at how climatic conditions affect the complex networks of relationships between bees and the plants they pollinate.

It analysed interactions across South America between the widespread *Centris* genus of bee with plant species that produce oil in their flowers.

Data on the occurrence of both the bees and the plants were obtained from 32 data publishers through GBIF, and from 60 datasets published from Brazil through [speciesLink](#).

#### PUBLICATION

Ecological Modelling

#### LOCATION OF RESEARCHERS

▪ [Brazil](#)

#### STUDY AREA

South America

#### DATA SOURCES

GBIF, speciesLink  
(<http://splink.cria.org.br>)

#### LINKS TO RESEARCH

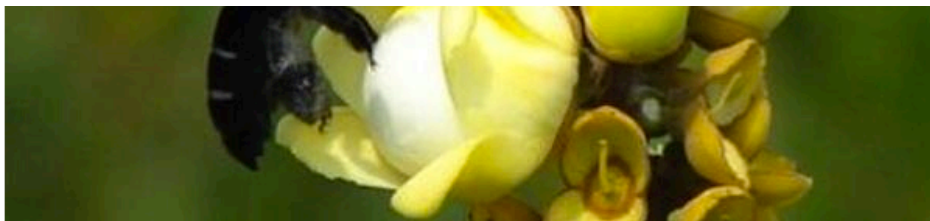
▪ [Abstract only \(subscription required for full article\)](#)

#### DATA USE CATEGORIES

▪ [Ecology](#)  
▪ [Species distributions](#)

#### TAGS

▪ [Brazil](#)  
▪ [Latin America](#)



This study from a team of Brazilian researchers looked at how climatic conditions affect the complex networks of relationships between bees and the plants they pollinate.

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The study found patterns in these interactions mainly associated with rainfall. Wetter areas tended to have higher numbers of species in the networks with each bee species having more plant 'partners'. Drier areas such as the Andes and northeast Brazil had fewer species and more specialized relationships between bees and plants.

The authors conclude that the interactions observed among pollinators and plants are probably influenced by a combination of current ecological processes and past evolutionary history.

*Photo: A female Centris dedundans on a Brazil nut flower. © M. C. Cavalcante, F. F. Oliveira, M. M. Maués, and B. M. Freitas. CC-BY-3.0.*

#### CITATION INFORMATION

Giannini, T.C. et al., 2013. Interactions at large spatial scale: The case of *Centris* bees and floral oil producing plants in South America. *Ecological Modelling*, 258, pp.74–81. Available at: <http://dx.doi.org/10.1016/j.ecolmodel.2013.02.032>.

#### RELATED GBIF RESOURCES

[Information about Centris genus from GBIF](#)

GBIF, speciesLink  
(<http://splink.cria.org.br>)

#### LINKS TO RESEARCH

- [Abstract only \(subscription required for full article\)](#)

#### DATA USE CATEGORIES

- [Ecology](#)
- [Species distributions](#)

#### TAGS

- [Brazil](#)
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#### NEXT FEATURED DATA USE

[Animal burrows are climate change refuges](#)





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# Centris Fabricius, 1804

Genus in GBIF Backbone Taxonomy

[Animalia](#) ▾ [Arthropoda](#) ▾ [Insecta](#) ▾ [Hymenoptera](#) ▾ [Apidae](#)

16,063

Occurrences

208

Species

[View occurrences](#)

Information

Feedback

## Overview

### FULL NAME

Centris Fabricius, 1804

### TAXONOMIC STATUS

Accepted genus

### EXTERNAL LINKS

▾ [Encyclopedia of Life](#)

### ACCORDING TO

The Catalogue of Life, 3rd January 2011

### PUBLISHED IN

Syst. Piezat. , 354.

### HABITAT

Not marine



## Georeferenced data

VIEW RECORDS

[All 14,229](#) | [In viewable area](#)

# Global Biodiversity Information Facility

Free and open access to biodiversity data

417,921,106

OCCURRENCES

1,426,888

SPECIES

12,042

DATASETS

584

DATA PUBLISHERS

Sharing biodiversity  
data for re-use

[Learn about GBIF](#)

[Publish your data through GBIF](#)

[Technical infrastructure](#)

Providing evidence for  
research and decisions

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Collaborating as a  
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Feedback

Search news items and information pages...

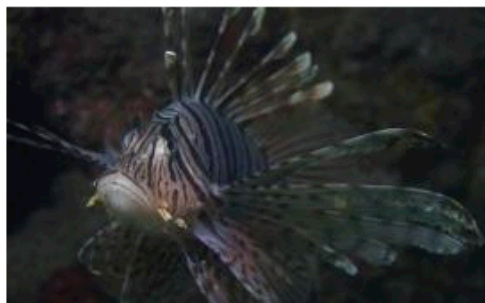
Search

## Latest GBIF news

[Go to GBIF Newsroom](#)

### FEATURED STORY

#### [Amateur divers share species data through GBIF](#)



### LATEST NEWS

November 20th, 2013

[Collaboration aims at new journal option for biodiversity data publishers](#)

November 13th, 2013

[Amateur divers share species data through GBIF](#)

November 11th, 2013

[New portal builds visitor numbers in first](#)

### UPCOMING EVENTS

DEC  
05

[Building workflows with Taverna workbench by BioVeL](#)

DEC  
09

[Second meeting of the IPBES Plenary](#)

DEC

[GBIF-France Day / Journée du](#)



# Using data

How data accessed through GBIF are used in research and policy

[Summary](#)[Science relevance](#)[Methods](#)[Data applications](#)[Policy relevance](#)[Feedback](#)

## Science relevance areas

GBIF-mediated data are used in a wide range of research projects addressing the key scientific questions relating to biodiversity. You will find a summary of the most commonly-used thematic areas on this page. Use the links on the right to jump to the area you would like to know more about.

### QUICK LINKS

- [Invasive alien species](#)
- [Climate change](#)
- [Conservation](#)
- [Food and farming](#)
- [Human health](#)
- [Species distributions](#)

## Invasive alien species



Overview

### QUICK LINKS

- [Climate change](#)
- [Conservation](#)
- [Food and farming](#)
- [Human health](#)
- [Species distributions](#)

### SEE ALSO

- [Featured research relating to invasives](#)

### EXTERNAL LINKS

- [Global Invasive Species Information Partnership](#)



# Invasive alien species

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## Overview

Research relating to the threat of invasive alien species is among the most common areas in which use of GBIF-mediated data is applied. In 2012, for example, nearly one in five of all use cases identified fell into this category. Typically, researchers use data recording the occurrence of a species either in its native range or in areas where it has invaded, or both, to build models to predict its potential spread, thus helping policy makers to assess invasion risks and to design appropriate prevention, control and eradication measures.

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## Types of use

Recent studies have used GBIF-mediated data in research to:

- Assess past, current and potential future spread of invasive species based on different climate scenarios and other parameters;
- Assess the drivers behind the spread of invasive species, including the effect of human influence;
- Assess the impacts and risks of invasive alien species on extinctions of native species, food security, ecosystems and human health

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## Peer-reviewed publications using GBIF-mediated data to assist research on invasive alien species

Most recent 3 publications in this category:

- [Will climate change promote future invasions?](#). Bellard, C. et al. *Global Change Biology*, (2013)
- [Effects of Climate Change, Invasive Species, and Disease on the Distribution of Native European Crayfishes](#). Capinha, C. et al. [*Pending journal name*], (2013)
- [The Use of Climatic Niches in Screening Procedures for Introduced Species to Evaluate Risk of Spread: A Case with the American Eastern Grey Squirrel](#). Di Febbraro, M. et al.

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## QUICK LINKS

- [Climate change](#)
- [Conservation](#)
- [Food and farming](#)
- [Human health](#)
- [Species distributions](#)

## SEE ALSO

- [Featured research relating to invasives](#)

## EXTERNAL LINKS

- [Global Invasive Species Information Partnership Gateway](#)
- [CABI Invasive Species Compendium](#)
- [IUCN/SSC Invasive Species Specialist Group](#)
- [Delivering Alien Species Inventories for Europe \(DAISIE\)](#)
- [Fishbase](#)
- [European Network on Invasive Species \(NOBANIS\)](#)
- [Global Invasive Species Information Network \(GISIN\)](#)
- [IABIN Invasive Species Network \(I3N\)](#)

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- [The Use of Climatic Niches in Screening Procedures for Introduced Species to Evaluate Risk of Spread: A Case with the American Eastern Grey Squirrel](#). Di Febbraro, M. et al. *PLoS ONE*, Volume: 8(7), (2013)

[see more...](#)

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#### Partnerships and collaborations

In 2012, GBIF joined the official launch of the [Global Invasive Alien Species Information Partnership \(GIASIP\)](#), involving several partners in collaboration with the Convention on Biological Diversity (CBD) to provide the information needs to tackle this major threat to biodiversity. An online gateway, in pilot phase, brings together a wide range of information including species lists, research articles and shared experiences in dealing with the issue. GBIF is actively involved in the development of a central registry of invasive species with a particular focus on standardization and interoperability challenges. From October 2013, GBIF Secretariat assumed the role of primary focal point and coordinator of this partnership, under an agreement with the CBD.

[Information Network \(GISIN\)](#)

- [IABIN Invasive Species Network \(I3N\)](#)

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## Climate change



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#### QUICK LINKS

- [Invasive alien species](#)
- [Conservation](#)
- [Food and farming](#)
- [Human health](#)



# Le point nodal GBIF France

Lancé en 2006 | Financé par le MESR | Intégré au MNHN  
Equipe de 7 personnes

- Aider à la **connexion des données** sur le portail GBIF en suivant les standards, protocoles et outils du GBIF
- Assurer des **actions de formation** (connexion, qualité des données, utilisation des données)
- **Collecter des métadonnées** sur les ressources de données primaires
- **Inform**er sur le GBIF, actions, appels à projet ...
- **Promouvoir et faciliter l'utilisation** des données et des outils GBIF par les utilisateurs
- **Collaborer avec les autres dispositifs** nationaux et internationaux sur la Biodiversité et le secrétariat du GBIF





À la une

# Le portail du GBIF France

En tant que membre du Système mondial d'information sur la biodiversité (GBIF) depuis sa création en 2001, la France s'engage à promouvoir l'accès libre et ouvert aux données sur la biodiversité, via Internet.

Grâce à un réseau mondial constitué de différents pays et d'organisations, le GBIF encourage et facilite la mobilisation, l'accès, la découverte et l'utilisation des données primaires sur les organismes au fil du temps et à travers la planète.

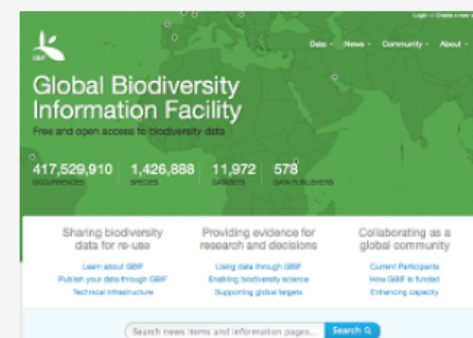
[Les missions du GBIF France](#)

[Les partenaires](#)

[Les jeux de données connectés](#)

[Exemples d'utilisation des données](#)

[Nous contacter](#)



## Dernières infos

- Mise en ligne du Global Biodiversity Informatics Outlook
- Événement GBIF du 09 décembre : l'inscription est ouverte
- Événement GBIF France le 09 décembre 2013
- Lancement du nouveau portail international du GBIF le 09 octobre !
- Newsletter GBIF septembre 2013

# Data Paper

Une incitation à la publication des  
données de biodiversité



# Data Paper : qu'est-ce que c'est?

Une **publication scientifique** dont le but principal est de **décrire un ensemble de données** ou un groupe d'ensembles de données, plutôt que de rendre compte d'analyses et de résultats de recherche.



# Data Paper : avantages



DOI : indexation et citation  
- indexés par Web of Knowledge (ISI), PubMedCentral, Scopus, Zoological Record, Google Scholar, CAB Abstracts, DOAJ, EBSCO.



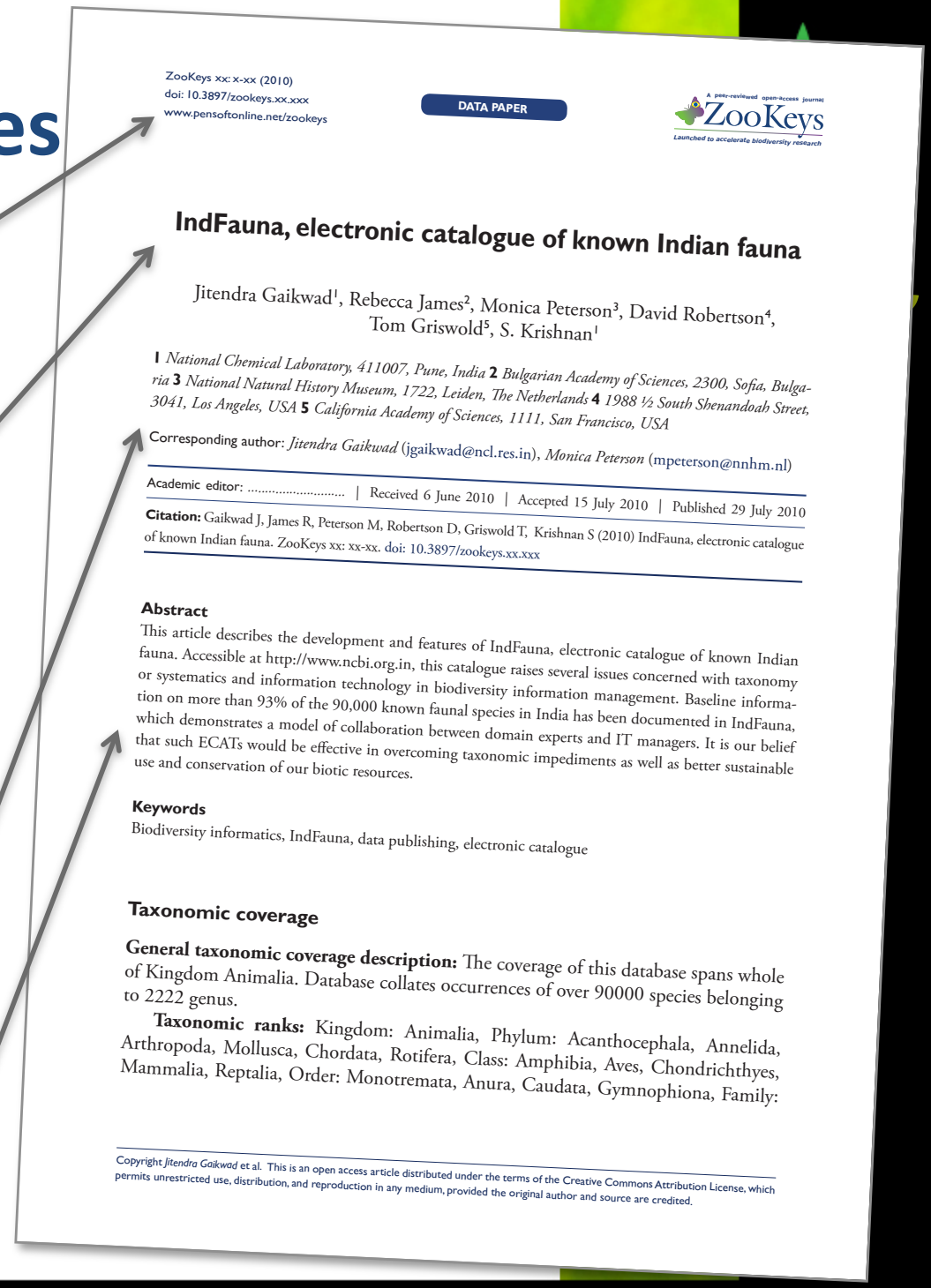
*Promouvoir et faire connaître les données*



Reconnaissance des éditeurs de données via une publication scientifique



Décrit les données sous forme structurée et lisible par un humain





2 d specimens of  
Améziane N,  
Guhamel G, Grif-  
Sands CJ, Schia-

http://gbrds.gbif.org/browse/agent?  
uuid=9dae1fa0-5800-4f18-8f4e-a87f05c73eb1



## Circumpolar dataset of sequenced spe...

Occurrence dataset published by Antarctic Biodiversity Information Facility (ANTABIF)

1 165

Occurrences

[View occurrences](#)

Information

Stats

Activity

### Summary

#### FULL TITLE

Circumpolar dataset of sequenced specimens of *Promachocrinus kerguelensis* (Echinodermata, Crinoidea)

#### DESCRIPTION

This circumpolar dataset of the comatulid (Echinodermata: Crinoidea) *Promachocrinus kerguelensis* (Carpenter, 1888) from the Southern Ocean, documents biodiversity associated with the specimens sequenced in Hemery et al. (2012). The aim of Hemery et al. (2012) paper was to use phylogeographic and phylogenetic tools to assess the genetic diversity, demographic history and evolutionary relationships of this very common and abundant comatulid, in the context of the glacial history of the Antarctic and Sub-Antarctic shelves (Thatje et al. 2005, 2008). Over one thousand three hundred specimens (1307) used in this study were collected during seventeen cruises from 1996 to 2010 in stations of the Southern Ocean, Kerguelen Plateau, Davis Sea, Dumont

#### PUBLISHED BY

[Antarctic Biodiversity Information Facility \(ANTABIF\)](#)

#### PUBLICATION DATE

1 mars 2012

#### REGISTRATION DATE

3 juin 2013

#### SERVED BY

[ANTABIF IPT](#)

<http://www.nature.com/scientificdata/>



# SCIENTIFIC DATA

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LAUNCHING  
in 2014

Helping you publish, discover,  
and reuse research data



## Credit

Credit, through a citable publication, for depositing & sharing your data



## Reuse

Complete, curated & standardized descriptions enable the reuse of your data



## Quality

Rigorous community based peer review



## Discovery

Find datasets relevant to your research



## Open

Promotes & endorses open science principles & available to all through a Creative Commons license



## Service

In-house curation, rapid peer review & publication of your data descriptions



# Ressources sur les data papers

- List of IPT installations supporting ‘Data Paper’ authoring

<http://tools.gbif.org/data-paper-authoring>

- PenSoft’ s IPT based data Hosting Center

<http://ipt.pensoft.net/ipt>

- PenSoft Data Publishing Policies and Guidelines for Biodiversity Data

[http://www.pensoft.net/J\\_FILES/  
Pensoft\\_Data\\_Publishing\\_Policies\\_and\\_Guidelines.pdf](http://www.pensoft.net/J_FILES/Pensoft_Data_Publishing_Policies_and_Guidelines.pdf)



# Contacts

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Site web: <http://www.gbif.fr>

Twitter : @gbiffrance

