(R)evolution towards an Open research institute
the Flemish research and knowledge center for nature and its sustainable management and use
We deal with
Human observations
Going back 20 years and more
Machine observations
Mainly via lifewatch.inbo.be
and
RESEARCH INSTITUTE
NATURE AND FOREST

we supply knowledge to all those who prepare or make the policies or are interested in them.
INBO identified twelve strategic goals. These goals can be considered general rules and best practices that should be implemented and fully applied by 2015. The sixth institutional goal:

"INBO manages and discloses [biodiversity] data"
But how?
We became GBIF Data Publisher
GBIF is the Global Biodiversity Information Facility and advocates free and open access to biodiversity data.
2010

GBIF licensing was catastrophic: 432 different licenses in use
2011

But who cared anyway?
We started publishing data!
2011

Metadata are important, not the license

http://creativecommons.org/licenses/by-nc/3.0/
**Resource Title** Florabank1 - A grid-based database on vascular plant distribution in the northern part of Belgium (Flanders and the Brussels Capital region)

**Basic Metadata**

The resource title and description are required. The resource's three main contact's must also be described here:

Resource contact, resource creator and metadata provider. For each contact you must supply at least a last name, a position or an organisation before you can make the resource public. The person(s) or organisation(s) responsible for the creation of the resource as it appears in the IPT and for effectively publishing the resource should add themselves as an associated party with role 'publisher'.

**Title**

Florabank1 - A grid-based database on vascular plant distribution in the northern part of Belgium (Flanders and the Brussels Capital region)

**Description**

Florabank1 is a database that contains distributional data on the wild flora indigenous species, archeophytes and naturalised aliens) of Flanders and the Brussels Capital Region. It holds about 3 million records of vascular plants, dating from 1800 till present. Furthermore, it includes ecological data on vascular plant species, redlist category information, Ellenberg values, legal

**Metadata Language**

- **English**

**Type**

- **Occurrence**

**Resource Language**

- **English**

**Subtype**

- **Observation**

**Resource Contact**
Florabank1: a grid-based database on vascular plant distribution in the northern part of Belgium (Flanders and the Brussels Capital region)

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For reference, use of the paginated PDF or printed version of this article is recommended.

Abstract

Florabank1 is a database that contains distributional data on the wild flora (indigenous species, archeophytes and naturalised aliens) of Flanders and the Brussels Capital Region. It holds about 3 million records of vascular plants, dating from 1800 to the present. Furthermore, it includes ecological data on vascular plant species, redlist category information, Ellenberg values, legal status, global distribution, seed bank etc. The database is an initiative of “Flo.Wer” (www.plantenwerkgroup.be), the Research Institute for Nature and Forest (INBO: www.inbo.be) and the National Botanic Garden of Belgium (www.brugov.be). Florabank aims at centralising botanical distribution data gathered by both professional and amateur botanists and to make these data available to the benefit of nature conservation, policy and scientific research.

The occurrence data contained in Florabank1 are extracted from checklists, literature and herbarium specimen information. Of survey lists, the locality name (verbatimLocality), species name, observation date and IBFL square code, the grid system used for plant mapping in Belgium (Van Rompaey 1943), is recorded. For records dating from the period 1972–2004 all pertinent botanical journals dealing with...
2011

Standardization is important, not the license
Darwin Core Standard
http://rs.tdwg.org/dwc/
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<th>minimumdistanceabovesurfaceinmeters</th>
<th>decimallatitude</th>
<th>decimallongitude</th>
</tr>
</thead>
</table>

Format: Darwin Core Archive: [t.co/rTKXo99eZx](https://t.co/rTKXo99eZx)

CSV data + XML metadata
2011

Hosted resources available through this IPT:

<table>
<thead>
<tr>
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<th>Name</th>
<th>Organisation</th>
<th>Type</th>
<th>Subtype</th>
<th>Records</th>
<th>Last modified</th>
<th>Last publication</th>
<th>Next publication</th>
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<tr>
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<td><strong>Belgian Coccinellidae - Ladybird beetles in Belgium (INBO subset)</strong></td>
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<td>Occurrence</td>
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<td>2013-08-08</td>
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<td><strong>Florabank1 - A grid-based database on vascular plant distribution in the northern part of Belgium (Flanders and the Brussels Capital region)</strong></td>
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<td><strong>Glasaalmigratie - Glass eel migration in the river Yser</strong></td>
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<tr>
<td><img src="image" alt="Loopkevers Grensmaas - Carabid beetles near the river Meuse in Flanders, Belgium" /></td>
<td><strong>Loopkevers Grensmaas - Carabid beetles near the river Meuse in Flanders, Belgium</strong></td>
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<td>2013-11-18</td>
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</tr>
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</table>
We started creating data portals in cooperation with the Belgian Biodiversity Platform.
Introduction

Ever since the year 1939 occurrences of vascular plants in Belgium and Luxembourg were registered in IFBL survey lists. The goal of this website is to compile and visualize this IFBL flora checklists data in one portal. At this time, the IFBL data Portal brings together data from three digitization projects from the Belgian Biodiversity Platform: IFBL, TRF, and the Flandriservice, the database that deals with the distribution data of the wild flora (indigenous species, archeospecies and naturalised aliens) of Flanders and the Brussels Capital Region.
Again, standardization is important, not the license
Darwin Core Standard
http://rs.tdwg.org/dwc/
2012 - 2013

We published a lot more datasets
We figured out that
Unavailable for legal reasons
As most of the GBIF data
Unavailable for legal reasons
Open licence?
CC0 + Norms for data use

2013 - 2014
2013

We signed the: Bouchout Declaration
The free and open use of digital resources about biodiversity and associated access services; Licenses or waivers that grant or allow all users a free, irrevocable, world-wide, right to copy, use, distribute, transmit and display the work publicly as well as to build on the work and to make derivative works, subject to proper attribution consistent with community practices, while recognizing that providers may develop commercial products with more restrictive licensing.

Policy developments that will foster free and open access to biodiversity data;
Tracking the use of identifiers in links and citations to ensure that sources and suppliers of data are assigned credit for their contributions;
An agreed infrastructure, standards and protocols to improve access to and use of open data;
Registers for content and services to allow discovery, access and use of open data;
Persistent identifiers for data objects and physical objects such as specimens, images and taxonomic treatments with standard mechanisms to take users directly to content and data;
Linking data using agreed vocabularies, both within and beyond biodiversity, that enable participation in the Linked Open Data Cloud;
Dialogue to refine the concept, priorities and technical requirements of Open Biodiversity Knowledge Management;
A sustainable Open Biodiversity Knowledge Management that is attentive to scientific, sociological, legal, and financial aspects.
We started working on the INBO Open data policy 2014
We almost won a price!

2014
January 2015

Approval of the INBO Open data policy
All scientific data for which (EV) INBO is (co-)owner are covered by this policy and can be published as open data, excluding legal exceptions.
12 months after collecting, data are eligible for publication
Raw data will be published
Result data associated with a scientific article, report, or advice will be published with the publication.
Data are unlocked as open data, as defined by the Open Definition, under the Creative Commons Zero waiver.
Published datasets always make a reference to the INBO norms for data use.
Opened data are always well documented with metadata
For all upcoming research projects a data management plan (DMP) is mandatory.
Researchers follow the open data policy
The INBO Information & Data Center supports researchers in the application of the open data policy.
INBO norms for data use

https://github.com/LifeWatchINBO/norms-for-data-use
Give credit where credit is due
Be responsible
Respect the data waiver
Get in touch!
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Research Institution</th>
<th>Type</th>
<th>Number</th>
<th>SCD Date</th>
<th>SC Date</th>
</tr>
</thead>
</table>
Thank You!

Dimitri Brosens
Data liaison officer – Belgian Biodiversity Platform

Peter Desmet
Team coördinator – LifeWatch INBO

Daniël Du Seuil
Head of service - information- and datacenter— INBO