

# Monitoring of agroenvironmental scheme in Wallonia

## Data management and sharing

**Julien Piqueray**

**13rd June 2017**

BID-REX workshop, Bilbao, Basque Country



- **Non-profit association**
- **26 permanent staff (+3 temporary)**
- **Main missions :**
  - **Support farmers for the implementation of Agroenvironmental Schemes (AES)**
  - **Support land-owners for the ecological restoration of their N2000 lands**
- **Funding:**
  - **Natagriwal is funded by the Wallonia**
  - **AES and N2000 restorations are co-funded by Wallonia and EU (Common Agricultural Policy – Second pillar)**

# AES support and monitoring process



Farmer contact &  
Farm Diagnosis



Management  
prescriptions



Monitoring



Farmer feed-back

**Biodiversity data**

Changes in the vegetation of hay meadows under an agri-environment scheme in South Belgium

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<sup>3</sup>University of Liege, Gembloux Agro-Bio Tech, Biodiversity and landscape Unit, Passage des Déportés 2, 5030 Gembloux, Belgium

J. Piqueray et al. / Conservation Evidence (2016) 13, 47-50

**AES evaluation**

# Natagriwal's organization

- 1 central office (management, communication, administration)
- 8 regional offices (local implementation of AES advisors)
- 3 scientific offices (in universities)

=> Huge need for shared solutions, including for biological data



Carte des directions extérieures du Département de l'Agriculture du Service public de Wallonie (SPW)

Équipe MAEC

**Central Office:**

- Christophe Manssens (W) 0498 79 99 89, cmanssens@natagriwal.be
- Julie Rouer (W) 0499 47 20 94, jrouer@natagriwal.be
- Stéphanie Gheysens (H) 0471 78 22 76, sgheysens@natagriwal.be
- Serge Rouxhet (H, M, C, L) 0494 45 24 08, srouxhet@natagriwal.be
- Anne Philippe (M) 0496 28 23 99, aphilippe@natagriwal.be

**Regional Offices:**

- Grégoire Dieryck (A) 0498 03 34 74, gdieryck@natagriwal.be
- Gisela Hennes (M) 0496 25 39 57, ghennes@natagriwal.be
- François-Xavier Warnitz (T) 0499 67 04 99, fxwarnitz@natagriwal.be
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- Thomas Gaillard (L) 0493 07 86 88, tgaillard@natagriwal.be

**Scientific Offices:**

- Suivi vétérinaire  
Conseil aux éleveurs sur la gestion des produits antiparasitaires appliqués au bétail présent sur les prairies de haute valeur biologique ou les prairies Natura 2000.

**Besoin d'un conseil pour vos Méthodes Agro-Environnementales et Climatiques (MAEC)?**

Dans le cadre du programme agroenvironnemental, une équipe de conseillers est à la disposition des agriculteurs pour établir des cahiers des charges adaptés à la situation. Pour trouver précisément le(a) conseiller(ère) actif(ve) dans votre commune: [www.natagriwal.be](http://www.natagriwal.be)

The logo for NAT AGRI WAL, featuring a stylized green and orange circular graphic to the left of the text "NAT AGRI WAL" in a bold, sans-serif font.

# Biodiversity data management and sharing : BioGeoNet

- **On-line database** : <https://www.biogeonet.ulg.ac.be/>
  - May be used from any connected place
  - by any person having access
    - On-demand
    - login-password system
    - users having more or less rights in terms of data visualization and export)
  - Managed by Natagriwal, but open to other projects/associations (LIFE projects, roadside monitoring, ...). Contact : Claude Dopagne [cdopagne@natagriwal.be](mailto:cdopagne@natagriwal.be)
- **2 main utilizations at Natagriwal** :
  - Raw biodiversity data saving and sharing
  - Structured/transformed data displaying (e.g. N2000, Arable plant-rich zones, species occurrence/range)

# BioGeONet Raw data saving and sharing

# BIOGEO

net

LOG OFF | No active group

Home Presentation Help

Database

Species

- List
- Pictures
- Search
- Links between species
- Habitats

Geographic data

- List
- Search
- Filters

Collections / Herbariums

- List / Search

Others






















- Checklists
- Legislation / Red List
- Encoding support
- Import

Members

## BIOGEOnet workspace

Julien PIQUERAY welcome on the BIOGEOnet intranet

You're a member of the following workgroups (WG) :

	MAE Bandes conservation messicole (MAE messicole)		
	MAE Bandes faunes (MAE faune)		
	MAE Cuivré de la Bistorte (MAE L. helle)		
	MAE divers (MAE divers)		
	MAE Essais en prairie (MAE Essais)		
	MAE Parc de la Burdinale (MAE Burdinale)		
	MAE PHVB Evaluation EC (MAE EC)		

### Activated workgroup

Click on the name of a group to activate its workgroup.

Only one group can be active at the same time. The data encoded during your session will be added to the active workgroup automatically.

### Votre activité

Your last visit :  
12-06-2017 at 10h53:47

Vos derniers encodages :

- 12-06-2017**  
Stachys palustris (Bande conservation messicoles Treignes M-1)
- 12-06-2017**  
Lepidium campestre (Bande conservation messicoles Treignes M-1)
- 12-06-2017**  
Fumaria vaillantii (Bande conservation messicoles Treignes M-1)
- 12-06-2017**  
Chenopodium polyspermum (Bande conservation messicoles Treignes M-1)
- 12-06-2017**  
Teucrium botrys (Bande conservation messicoles Treignes M-1)

# BioGeNet Raw data saving and sharing

The image shows a screenshot of the BioGeNet web interface. On the left is a blue sidebar with navigation menus. The main area on the right displays a satellite map with numerous red circular markers representing data points. A scale bar at the bottom left of the map indicates 10 km. The sidebar contains the following sections:

- Help**
- Database**
  - Species
    - List
    - Pictures
    - Search
    - Links between species
    - Habitats
  - Geographic data
    - List
    - Search
    - Filters
  - Collections / Herbariums
    - List / Search
  - Others
    - Checklists
    - Legislation / Red List
    - Encoding support
    - Import
- Members**
  - Welcome
  - Your account
  - Members
  - Workgroups
- Various**
  - BIOGEOnet carto
  - Geocatalog
  - Downloading

# BioGeoNet Raw data saving and sharing

**General**

Home  
Presentation  
Help

**Database**

**Species**  
List  
Pictures  
Search  
Links between species  
Habitats

**Geographic data**  
List  
sel Bande conservatio...  
Search  
Filters

**Collections / Herbariums**  
List / Search

**Others**  
Checklists  
Legislation / Red List  
Encoding support  
Import

**Members**


Welcome  
Your account  
Members  
Workgroups

**Various**

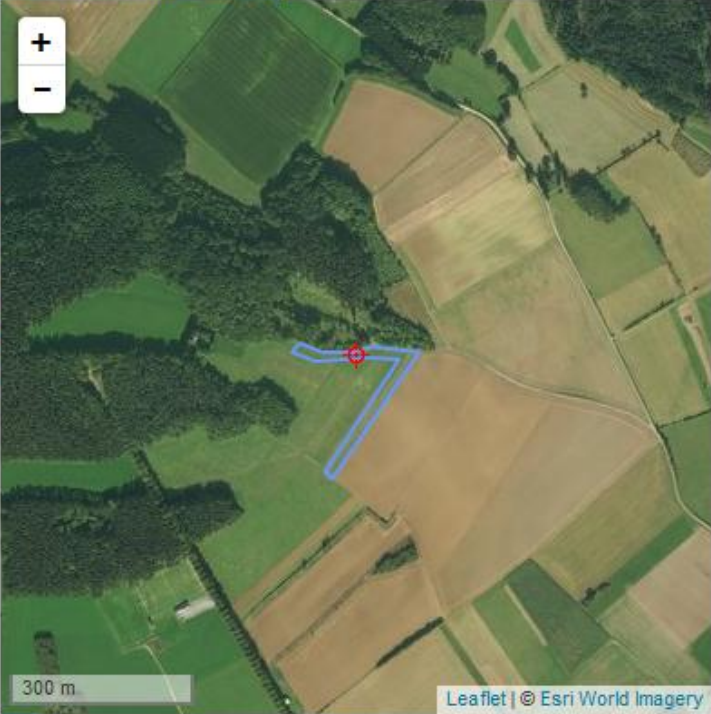
**Station** Observations Taxonomy Phytosociology Zoocenology Characteristics Sel

## Station : Bande conservation messicole Bure 11-1

**Informations on the station**

Name of the station	Bande conservation messicole Bure 11-1
Locality	Tellin
Country	Belgium
Area	Province de Luxembourg
Latitude (WGS 84)	50°06'0.1474"
Longitude (WGS 84)	5°14'44.7094"
X (BE LB72)	212744.205
Y (BE LB72)	88018.417
Coordinates of origin	BE LB72
IFBL	J63541
MGRS (WGS 84)	31UFR6060552169
Altitude	277m
Area	1km <sup>2</sup>
Commentaries	Bande active
Confidentiality	Public
Associated workgroup	MAE Bandes conservation messicole (MAE messicole)
Organisme	Natagriwal 
Encoder	Julien PIQUERAY, the 11-09-2014
Modificateur autorisé	Valentin GILLIAUX
Modification	Julien PIQUERAY, the 08-08-2016
Infos confidentielles (visible par Natagriwal) :	
Nr producteur	18407800437

**Localisation**



Fond de carte : Esri World Imagery (10000k)  
Superposition : Aucune

Localisation : Rue de Han, Tellin, Neufchâteau, Luxembourg,



# BioGeNet Raw data saving and sharing

Habitats

**Geographic data**

List

▶ sel Bande conservatio...

Search

Filters

**Collections / Herbariums**

List / Search

**Others**

Checklists

Legislation / Red List

Encoding support

Import

---

**Members**

Welcome

Your account

Members

Workgroups

---

**Various**

BIOGEOnet carto

Geocatalog

Downloading

Coordinate conversion

Dictionaries

Lexicon

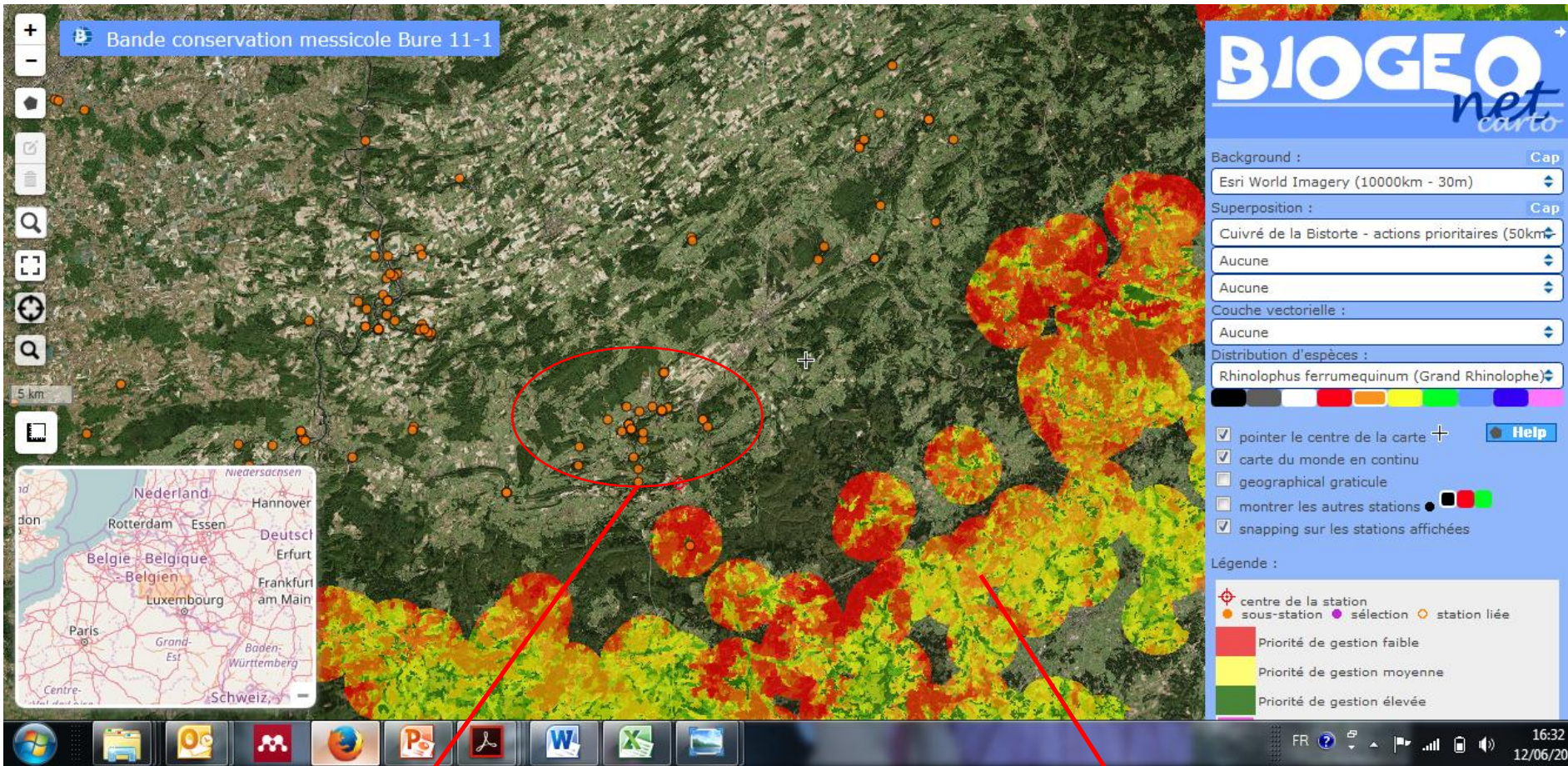
Statistics

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30-06-2014	Caryocodia euphratica	Plantae Convolvulaceae
30-06-2014	Capsella bursa-pastoris	Plantae Brassicaceae
30-06-2014	Chaenorrhinum minus	Plantae Scrophulariaceae
30-06-2014	Chenopodium album	Plantae Chenopodiaceae
30-06-2014	Convolvulus arvensis	Plantae Convolvulaceae
30-06-2014	Daucus carota carota	Plantae Apiaceae
30-06-2014	Euphorbia exigua	Plantae Euphorbiaceae
30-06-2014	Euphorbia helioscopia	Plantae Euphorbiaceae
30-06-2014	Fallopia convolvulus	Plantae Polygonaceae
30-06-2014	Fumaria officinalis	Plantae Fumariaceae
30-06-2014	Geranium dissectum	Plantae Geraniaceae
30-06-2014	Geranium molle	Plantae Geraniaceae
30-06-2014	Kickxia elatine	Plantae Scrophulariaceae
30-06-2014	Lamium purpureum	Plantae Lamiaceae
30-06-2014	Medicago lupulina	Plantae Fabaceae
30-06-2014	Medicago sativa	Plantae Fabaceae
30-06-2014	Mercurialis annua	Plantae Euphorbiaceae
30-06-2014	Misopates orontium	Plantae Scrophulariaceae
30-06-2014	Myosotis arvensis	Plantae Boraginaceae
30-06-2014	Papaver dubium lecoqii	Plantae Papaveraceae
30-06-2014	Papaver rhoeas	Plantae Papaveraceae
30-06-2014	Polygonum aviculare	Plantae Polygonaceae
30-06-2014	Sherardia arvensis	Plantae Rubiaceae
30-06-2014	<b>Silene noctiflora</b>	Plantae Caryophyllaceae
<p>Number of specimens 3</p> <p>Recovery 3</p> <p>Equivalence = Braun-Blanquet 1 (1 - 5 % = Rare)</p> <p>Gender Indéterminé</p> <p>DAFOR R</p> <p>Export GBIF, the 30-03-2017</p> <p>Encoder Julien PIQUERAY, the 11-09-2014</p>		
30-06-2014	Sinapis arvensis	Plantae Brassicaceae
30-06-2014	Solanum nigrum	Plantae Solanaceae
30-06-2014	Sonchus arvensis	Plantae Asteraceae
30-06-2014	Sonchus asper	Plantae Asteraceae
30-06-2014	Stachys arvensis	Plantae Lamiaceae

# BioGeNet: «structured » data displaying

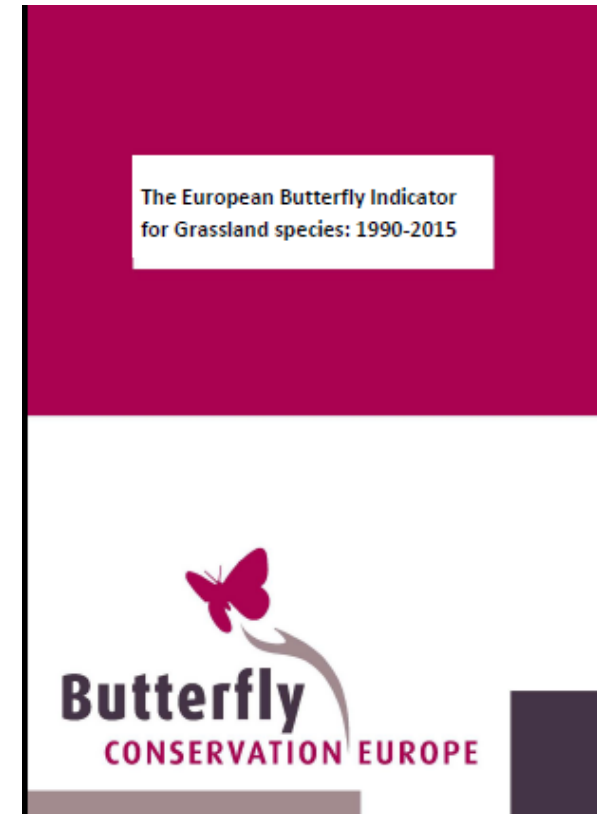


Greater horseshoe bat  
occurrences

Violet Copper habitat  
favourability

# Data sharing policy: within established projects

- **EX 1: European Grassland Butterfly Indicator**
  - From butterfly monitoring data
  - Data formatted to correspond to BCE standards
  - Periodic sending (every 2 or 3 years, depending on European Environmental Agency deadlines)



# Data sharing policy: within established projects

## ➤ EX 2: Hay meadows (N2000 : 6510/6520) habitat conservation status in Wallonia

- From grassland monitoring data
- Conservation Criteria computation (Walloon admin. – DEMNA)
- User-friendly monitoring sheet for farm advisors

2 = Indicatrices des prés de fauche montagnards

2b = Indicatrices des prés de fauches sub-montagnards

3 = Indicatrices de qualité des prairies

1 = Indicatrices des prés de fauche (tous types confondus)

N.B.: La bistorte est indicatrice des deux types de prés

**Prairie montagnarde (au min 2 sp (2) ; alt gén. >550m)**

	A	B	C	D
Nombre (1)	>8	3-8	2	<2
Nombre (2)	>4	3 ou 4	2	<2
Recouvrement (2)	> 40%	20-40%	10-20%	<10%

**Prairie submontagnarde (au min 1 sp 2b, alt gén. 300-550m)**

	A	B	C	D
Nombre (1)	>6	3-6	2	<2
Nombre (2b)	>2	2	1	0
Recouvrement (1+2b)	> 30%	15-30%	10-15%	<10%

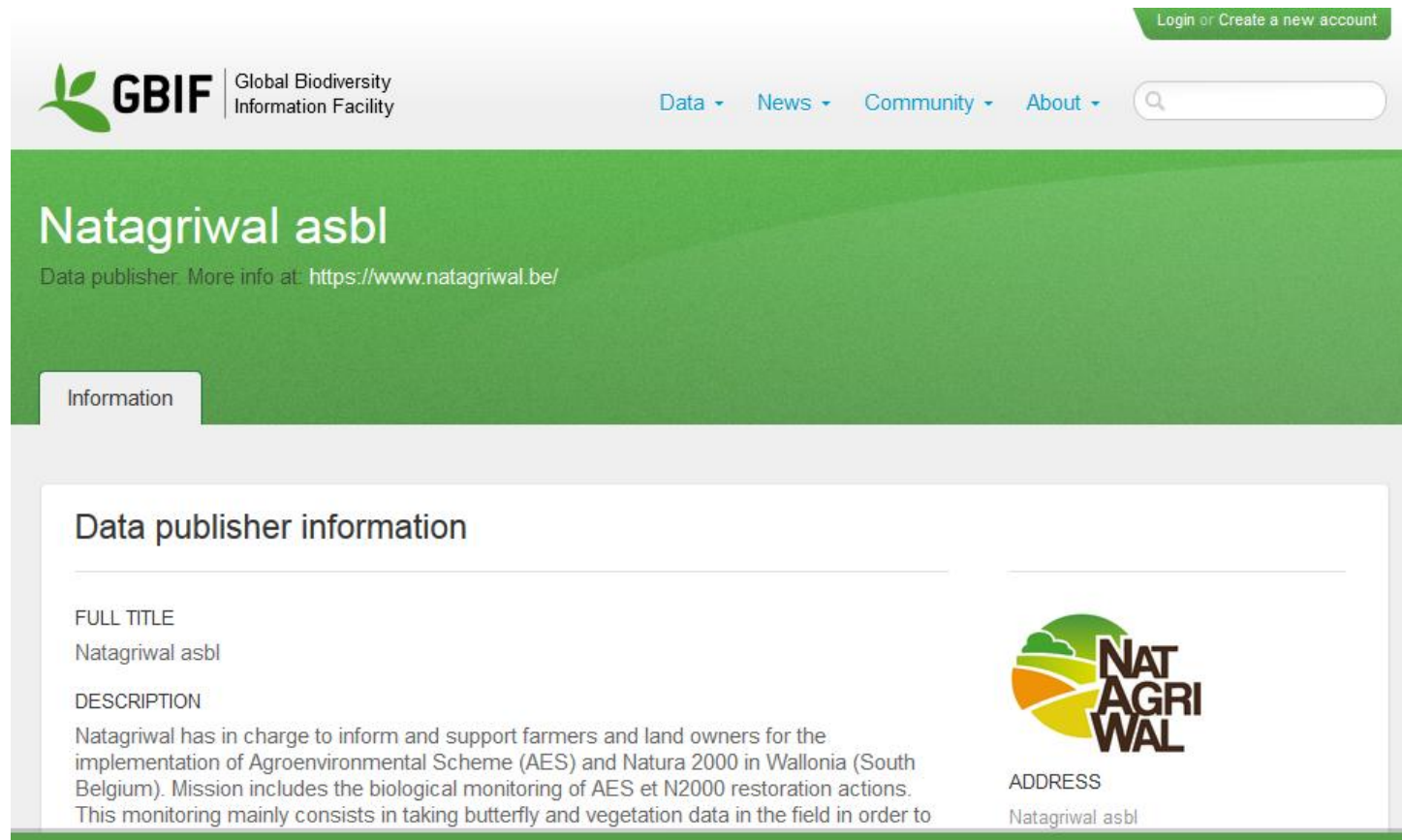
**Prairie de plaine (alt gén. <300m, pas d'espèces (sub-)montagnardes)**

	A	B	C	D
Nombre (1)	>6	4-6	3	<3
Recouvrement (1+3)	> 50%	25-50%	10-25%	<10%

Criterion*	Conservation Status			
	A	B	C	D
Criterion 1: number of characteristic species (list 1)	≥ 7	4-6	3	<3
Criterion 2: cover of characteristic species + other indicators of habitat quality (lists 1 and 2)	≥ 50%	25-50%	10-25%	<10%
Criterion 3: cover of nitrophilous species (list 3)	≤ 10%	10-30%	≥ 30%	
Criterion 4 : cover of high grazing intensity species	< 40%	40-60%	≥ 60%	

# Data sharing policy: Raw data

- **Data transfer to Walloon administration (DEMNA)**
  - DEMNA is a user of BioGeoNet with full access (including export) to Natagriwal data
- **Open-access policy implemented through GBIF**



The screenshot shows the GBIF (Global Biodiversity Information Facility) website interface. At the top right, there are links for "Login or Create a new account". The main navigation bar includes "Data", "News", "Community", and "About", along with a search bar. The main content area features a green header with the text "Natagriwal asbl" and "Data publisher. More info at: <https://www.natagriwal.be/>". Below this, there is a tab labeled "Information". The main content area is titled "Data publisher information" and contains the following details:

FULL TITLE	Natagriwal asbl
DESCRIPTION	Natagriwal has in charge to inform and support farmers and land owners for the implementation of Agroenvironmental Scheme (AES) and Natura 2000 in Wallonia (South Belgium). Mission includes the biological monitoring of AES et N2000 restoration actions. This monitoring mainly consists in taking butterfly and vegetation data in the field in order to
ADDRESS	Natagriwal asbl

The Natagriwal logo is displayed on the right side of the information section.



**Thank you for your attention**

