

# Highlights Report

2018

BELGIAN BIODIVERSITY PLATFORM





Dr Hilde Eggermont, Coordinator of the Belgian Biodiversity Platform *Biodiversity with its three components – genetic diversity, species* diversity, and ecosystem diversity - is essential to the food we eat, to the water we drink and the air we breathe. Yet, at present, the concept of 'biodiversity' is still not widely understood. Like global warming in the past, the concept of biodiversity seems distant and abstract and, as a result, its economic, social and environmental importance is often underestimated. Similarly, in the present day, politicians are rarely elected for protecting the environment, but rather for what they do to improve the economy, human security and human health. Therefore, if we are to successfully promote the importance of conserving biodiversity to decision-makers and the wider public, we need to link biodiversity loss to the issues of most concern to decision-makers. We also need to link the implications of biodiversity loss to the Sustainable Development Goals that governments worldwide have endorsed. We need to demonstrate that there is no dichotomy between economic growth and environmental protection. The world is slowly waking up as it also shows from the climate demonstrations in the Belgian streets, but a lot still remains to be done.

The most effective means of connecting science with policy and society is debatable, and impacts are hard to measure. Yet, science-policy interfaces (such as the Belgian Biodiversity Platform at national level, the EKLIPSE mechanism at European level, and the IPBES at international level) are critical to raise awareness, to shape environmental governance, and to develop pathways to a more sustainable future. Over the years, the Belgian Biodiversity Platform has diversified its portfolio in an attempt to contribute to these overarching goals. In this brochure, you will learn how we further developed our activities in 2018, focusing on three key domains: open data, knowledge brokerage, and topical knowledge incubation. You will read about outcomes that we consider stepping stones to societal transformation, whether large or small.

Last but not least - welcome to 2019! We hope the year will be positive in a double dimension. Positive for nature of course, which should not be destroyed for human development. And positive for humanity that can continue to benefit from the ecosystem services that nature offers. Clearly, the year will be a transition to what many call 'the 2020 super year' when some of the world's most important policy instruments for sustainable development (the Paris Agreement, the Sustainable Development Goals, and the Convention for Biodiversity) will converge and influence policy makers to hopefully make the right decisions to 'bend the curve'.

The Belgian Biodiversity Platform looks forward to continuing collaborative efforts with the different actors at the subnational, national, European and global level. On behalf of the team, I wish you a pleasant reading.

Dr Hilde Eggermont, Coordinator of the Belgian Biodiversity Platform

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The **Belgian Biodiversity Platform** is a science-policy interface providing services to the Belgian scientific community engaged in biodiversity research, policymakers and practitioners. Our activities are structured around three main axes:

- Knowledge Brokerage
- Topical Knowledge Incubation
- Open Data

#### **KNOWLEDGE BROKERAGE**

- In 2018 we acted as knowledge broker in several ways:
- Providing evidence-based knowledge for decision-making
- Participating in science programming and funding
- · Responding to requests related to biodiversity from policy and society

#### **TOPICAL KNOWLEDGE INCUBATION**

In 2018, we acted as topical knowledge incubator by offering scientists, policy-makers, practitioners and other stakeholders, the opportunity to incubate and enrich their knowledge with other experts on the following topical issues:

- Invasive Alien Species
- Ecosystems & Society
- Biodiversity & Health
- Nature-based Solutions (NbS) and conservation

#### **OPEN DATA**

In 2018, we enhanced open access to biodiversity data. We actively mobilised data from Belgian scientists in a diversity of scientific insitutes; we provided data cleaning services, tools and methodologies; we provided guidance on biodiversity informatics standards; and we built the capacity of scientists in Belgium and abroad on open data. We published biodiversity data online on a global data portal. And we also provided guidance on data usage. Furthermore, we also provided strategic input into global initiatives related to biodiversity data.

#### INTRODUCTION

KNOWLEDGE BROKERAGE



EVIDENCE-BASED KNOWLEDGE FOR DECISION-MAKING

SCIENCE PROGRAMMING AND FUNDING

RESPONDING TO REQUESTS FROM POLICY AND SOCIETY



#### **IPBES**

EVIDENCE-BASED KNOWLEDGE FOR **DECISION-MAKING** 

through the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)



The Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES) is the intergovernmental body which assesses the state of biodiversity and of the ecosystem services it provides to society, in response to requests from decision makers. Acting as National Focal Point to IPBES (IPBES NFP), the Belgian Biodiversity Platform actively participated in contributing to the implementation of the IPBES work programme, and promoting awareness and uptake of IPBES outcomes in Belgium.

#### **IPBES PLENARY**

The governing body of IPBES is the Plenary. It is made up of the representatives of IPBES members (governments) and usually meets once per year. In 2018, the sixth session of the IPBES Plenary took place in Medellin from 17 to 24 March. Hilde Eggermont, IPBES National Focal Point, acted as Head of the Belgian Delegation.

Prior to the IPBES Plenary meetings, our preparatory work consisted in:

- Belgian coordination meetings, during which different Belgian entities met and decided on the position of Belgium on the different topics on the agenda of the Plenary.
- Several formal and informal meetings with EU Member • States and the European Commission to prepare a common position.

During the IPBES Plenary attended by representatives of the 132 member states, the Belgian delegation was actively engaged in discussions and tried to best convey the views of Belgium and the EU on the different agenda points. For example, Belgium acted as EU lead for the topic focusing on the review of the scientific and administrative functions of IPBES.

Before, during and after the plenary, the Belgian Biodiversity Platform also promoted IPBES and its outcome in Belgium. For instance, we worked on media outreach, by sharing press releases on the importance of the IPBES Plenary and the ongoing discussions in Medellin. We also mobilised the Belgian scientific community to take part in the signing of an Open Letter for Biodiversity, calling for Belgian authorities to take into consideration the IPBES outcomes. Different articles were published in both French- and Dutch-speaking media including La Libre Belgique, Le Soir, Le Vif, RTBF, RTL, 7 sur 7, Métro, ParisMatch, La Dernière Heure; and De Morgen, De Standaard, Knack, VRT, Metro, Het Laatste Nieuws, De Tijd, VILT, MO. Reaching out to media allowed for the growing attention of the general public and of decision-makers to the importance of safeguarding biodiversity.

### **OPEN LETTER FOR BIODIVERSITY** Be a signatory! of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

#### Open Letter for Biodiversity addressed to Belgian authotirites

After the Plenary, the Belgian Delegation report was handed over to the relevant Belgian administrations, and as a follow-up of the Plenary, the IPBES Belgian Focal Point organised several meetings throughout 2018 to actively engage Belgian stakeholders in the process. Furthermore, throughout the year, we also kept on informing Belgian stakeholders on IPBES developments and we mobilised Belgian experts to take part in the two upcoming IPBES assessments: the thematic assessment on "Sustainable use of wild species" and the methodological assessment regarding the "Diverse conceptualisation of multiple values of nature and its benefits" (also known as the "Values" assessment") through mailing lists, newsletters, and social media.

#### **CONTRIBUTION TO IPBES ASSESSMENTS**

In 2018, Sander Jacobs, Biodiversity Expert for the Belgian Biodiversity Platform, received funding for a research stay in Bilbao by the Departement Omgeving - Vlaanderen under the Flanders-Basque Country Declaration of Intent. During this 3-month research stay, Sander contributed to the IPBES Values assessment. Together with the



Colombia 17-24 March 2018

#### EVIDENCE-BASED KNOWLEDGE FOR **DECISION-MAKING**

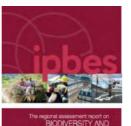
through the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)



IPBES Technical Support Unit, Sander was also active in reviewing the incorporation of plural values in the upcoming IPBES Global Assessment (to be approved in 2019 by the Plenary). The Technical Support Group was assisted by Sander in organising and facilitating sessions of a workshop in Morelia, Mexico, which was attended by circa 15 experts who took part in the IPBES Global Assessment. Together, they went through the document and made comments and recommendations on how to harmonise the way multiple values are being used in the Global Assessment. This series of comments and recommendations were sent to the authors during the second review phase of the assessment. Altogether, over 300 comments and suggestions for improvement were made.

During his research stay in Bilbao, Sander also worked on a cross-cutting analysis of all key messages of the four IPBES regional assessments. This exercise intended to analyse the differences and similarities of biodiversity

trends across the different regions of the world. The key elements identified in this analysis were the urgency for governments to take actions for biodiversity, and the identification of examples of the type of actions that helped curbing the state of biodiversity loss worldwide. The goal of the latter



CENTRAL ASI

conclusion is to state that despite the worldwide loss of biodiversity, some effective solutions exist and should be replicated in other parts of the world. A paper analysing the conclusions of this exercise will be published in 2019.

Another activity of this research stay consisted in analysing scenarios produced by the IPBES Regional Assessment on Europe and Central Asia (ECA Assessment). The objective of this exercise was to compare and evaluate the different scenarios and point to pathways towards a sustainable future for the ECA region. This analysis will also be published in 2019.

Following this work, Sander Jacobs was selected as Coordinating Lead Author for Chapter 3 of the IPBES Values Assessment.

Keune, Biodiversity Expert of the Belgian Hans Biodiversity Platform also contributed to IPBES assessment. He contributed as lead author to chapter 2 'Nature Contributions to People and Quality of Life' of the IPBES regional assessment for Europe and Central Asia. In his contribution he focused mainly on health issues, medicinal plants, governance and (health) equity.

#### **IPBES BELGIAN UPTAKE EVENT**

The IPBES Belgian Uptake event was organised by the IPBES Belgian Focal Point which is hosted by the Belgian Biodiversity Platform. The event took place on October 1, 2018 at the Research Institute for Nature and Forest (INBO), and was attended by about 80 participants. The one-day event had a number of objectives: promoting IPBES, the uptake of its assessments (especially the Regional Assessment for Europe & Central Asia), inform the audience how they can participate in IPBES, and how it can contribute to its work. On a more practical side, this event also aimed to spur concrete actions and engagement of decision-makers and other stakeholders in Belgium.



Participants to the IPBES Belgian Uptake Event

The programme of the event consisted in a number of presentations, a panel discussion, and breakout groups for each of the three Belgian regions. The discussions of the breakout groups session were organised around three questions:

· Which ongoing regional initiatives could be reinforced by the IPBES outcomes and how?

#### EVIDENCE-BASED KNOWLEDGE FOR DECISION-MAKING

through the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)



- Which potential new regional initiatives could be leveraged by IPBES outcomes?
- What could the region do to support IPBES itself? especially in terms of research and innovation, capacity building, resource mobilisation, etc.

The breakout sessions resulted in concrete suggestions to enhance biodiversity in the regions based on the IPBES outcomes. These recommendations are available in the report of the IPBES Uptake event.

#### FOURTH CONSULTATION OF BELGIAN EXPERTS AND STAKEHOLDERS ON IPBES

On May 15, 2018 the IPBES Belgian Focal Point organised the fourth consultation of Belgian experts and stakeholders on IPBES. The goal of the exchange was to provide an update on the status of the implementation of the IPBES Work Programme, share information on ongoing and forthcoming calls, as well as to collect feedback on how to improve the services offered by the IPBES Focal Point. In addition, participants had the opportunity to share their comments on the draft Global Assessment, a new global synthesis of the state of nature, ecosystems and nature's contribution to people - the first such report since the landmark Millenium Ecosystem Assessment was published in 2005, and the first ever that is intergovernmental. We then collected these reviews and submitted a Belgian response to IPBES. We also shared these views of Belgian stakeholders during the Pan-European Stakeholders Consultation for IPBES on June 6-7, 2018 in Bern.

#### FIFTH PAN-EUROPEAN STAKEHOLDERS CONSULTATION FOR IPBES

On June 6-7, 2018, the Swiss Biodiversity Forum, the Network-Forum of Biodiversity Research Germany (NeFo), the Fondation pour la recherche sur la biodiversité (FRB) and the Belgian Biodiversity Platform co-organised the fifth Pan-European Stakeholders Consultation (PESC) meeting in Bern, Switzerland. The objectives of the PESC-5 meeting were to share experiences and strategies on the uptake of the findings and policy output of the IPBES ECA assessment in each country, and in different sectors. The goal was also to collectively discuss the draft Global Assessment, and collect comments to be submitted to IPBES from a stakeholders' perspective during the open review phase. Furthermore, discussions on the strategic framework for the next work programme of IPBES (post-2019) also took place. The Belgian Biodiversity Platform provided input for the development of the programme of the day, helped to facilitate brainstorm sessions and gave a talk on the relevance of IPBES in the context of research programming and funding at the pan-European level.

#### **CAPACITY BUILDING WORKSHOP**

The 'IPBES consultation and capacity building workshop' took place on June 4-6 in Bonn, Germany. The Belgian Biodiversity Platform prepared the positions of Belgium for the workshop that was attended by a representative of the Research Institute of Nature and Forest (INBO). Discussions focused on the use of the concept of Nature's Contributions to People in the IPBES context; the review of the Global Assessment and the strategic framework for the new IPBES work programme.

### WORKSHOP ON POLICY SUPPORT TOOLS

Hilde Eggermont participated in a workshop entitled 'IPBES function "Policy Support Tools and Methodologies" – options for future activities'. It took place on January 16-17, 2018 in Leipzig, Germany. Organised by UFZ, the purpose of the workshop was to reflect on the policy support function of IPBES and to discuss what IPBES would ideally deliver to meet the needs of policy makers and practitioners. This discussion resulted in recommendations for the future work of IPBES which were made available for the IPBES plenary meeting that took place in March 2018 so that they could be considered as elements for the second IPBES work programme planned to start in 2019.

#### **IPBES CAPACITY BUILDING FORUM**

Hilde Eggermont participated in the 3rd meeting of the IPBES Capacity building forum which took place on 25-26 September, 2018 in Paris, France. The overall objective of the meeting was to further enhance collaboration with organisations in the implementation of the IPBES capacity-building rolling plan. More specifically, we participated in the identification of specific opportunities for collaboration for the uptake of IPBES assessments and the set-up of national and (sub-)regional sciencepolicy platforms. We also helped advising on further development of the IPBES capacity building function; and assisted in the facilitation of breakout groups, wrap up and reporting. The resulting report will be shared with all the IPBES Members as an information document for the next Plenary scheduled for May 2019.

#### ACTIVE INPUT TO THE ECA-NETWORK

Throughout 2018, the Europe and Central-Asia Network of organisations engaging in IPBES (<u>ECA-Network</u>) website was updated by the Belgian Biodiversity Platform with resources such as relevant publications related to IPBES and results of consultations at national level. Several exchanges of best practices were shared among members through the internal mailing list of the network. Furthermore, Sweden joined as new member in 2018.

#### SCIENCE PROGRAMMING AND FUNDING

through BiodivERsA Partnership



#### COORDINATION OF THE BIODIVERSA PARTNERSHIP

Acting as Vice-Chair to BiodivERsA, Hilde Eggermont assisted in the coordination of **BiodivERsA**, a paneuropean network of agencies and ministries funding and programming research on biodiversity, ecosystem services and nature-based solutions. In 2018, this included further work towards a sustainable future for the network through negotiations with the European Commission and the Member States. For example, work was undertaken to define and promote possible ERA-NETs cofund actions in the 2019 and 2020 Work Programme of Horizon2020. In 2018, the network became a formal strategic body, the BiodivERsA Partnership which aims at developing and implementing a shared vision and joint activities for biodiversity research. Collaborations with relevant Joint Programming Initiatives (Water JPI, JPI Oceans, JPI Climate, FACCE-JPI) and science-policy platforms such as EKLIPSE and IPBES were also strengthened. One example of close collaboration with a JPI was the organisation of a strategic workshop in Brussels with the Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-IPI). The workshop allowed to identify key topics (thematic priorities) at the crossroad between biodiversity, agriculture and climate change, and possible modalities for collaboration on the short- and long-term between both bodies.

#### SUPPORT TO THE BIODIVSCEN ACTION

Following a collaboration between the Belmont Forum and BiodivERsA, the BiodivScen Action started in October 2017. This Action, aiming at supporting international research on scenarios of biodiversity and ecosystem services, is supported by members from BiodivERsA and the Belmont Forum and by the European Commission through an ERA-NET COFUND. Lise Goudeseune, Biodiversity Expert for the Belgian Biodiversity Platform, has been leading the tasks allocated to Belspo. In 2018, this included the elaboration of an implementation plan for the uptake of relevant research results in key international initiatives; the outline of the report on the mapping of international collaborations between the ERA and other world regions including the ERA; the elaboration of a concept note for the BiodivScen Open data workshop to take place mid-2019; and the development of an implementation plan and set-up of a cooperation framework for interaction between BiodivScen and IPBES.

#### SUPPORT TO BIODIVERSA

In 2018, BiodivERsA launched a call for proposals on the interlinkages between Biodiversity and Health. The call themes were identified through an expert workshop coorganised by the Belgian Biodiversity Platform and the BiodivERsA Secretariat in Brussels.

Throughout the year, BiodivERsA also kept on elaborating <u>policy-briefs</u> resulting from research results of BiodivERsA funded projects. In this regard, the Belgian Biodiversity Platform facilitated the contact with a professional knowledge broker (the Institute for European Environmental Policy, IEEP), it provided support in defining the topics of the policy briefs, as well as input to the actual content. The policy briefs produced in 2018 focused on policy relevant topics such as Invasive Alien Species; tipping points; and the Common Agricultural Policy (CAP) reform.



BiodivERsA policy brief on the CAP

#### SCIENCE PROGRAMMING AND FUNDING

through BiodivERsA Partnership



In 2018, BiodivERsA also produced a <u>video</u> presenting the results of the 'Urban Biodiversity and Ecosystem Services' (<u>URBES</u>) research project. URBES was funded under the 2010-11 BiodivERsA call on "Biodiversity and Ecosystem Services and their Valuation". The video shows the results of the research project and the impacts it had on

policy, practice, and society. The Belgian Biodiversity Platform led the production of this video, along with URBES researchers and the

BiodivERsA secre-

tariat.



Video on the URBES project

In 2018, Lise Goudeseune and Maxime Coupremanne launched a questionnaire on Biodiversity Research Infrastructures (BRI) in Belgium. This survey was conducted following-up on a previous mapping exercise done under the framework of BiodivERsA resulted in the elaboration of a report on the Access and Use of Biodiversity Research Infrastructures in Belgium.



Report on BRI

Furthermore, a listing of BRI will be made available on the Belgian Biodiversity Platform website in 2019.



BiodivERsA Guide on Policy Relevance of Research In 2018, BiodivERsA also produced a <u>Guide on Policy relevance</u>, coauthored by Hilde Eggermont. The objective of the guide is to help researchers better understand what kind of research is considered of policy relevance, get information on the criteria for evaluating policy relevance in BiodivERsA research calls, and identify the most relevant policies and policy-making bodies for a given research project.

Finally, throughout the year, Lise Goudeseune, Biodiversity Expert of the Belgian Biodiversity Platform and André Heughebaert IT Manager also provided continuous support to the update of the <u>BiodivERsA database</u> that compiles information about past and current funding programs on biodiversity in Europe (including thematic and blue sky programs, grants, fellowships and studentships), research organisations, and project leading researchers active in biodiversity research. The database is currently referencing 11,500 biodiversity projects since 2005.

The 'European Knowledge and Learning Mechanism for Biodiversity and Ecosystem Services' (EKLIPSE) is an EU-funded project that aims to create a long-lasting mechanism to answer questions affecting biodiversity so that any decision-maker, practitioner or other stakeholder (CSO, NGO...) can make evidence-based decisions. The Belgian Biodiversity Platform is co-coordinator and co-host of the Secretariat, as well as partner of this project.

# ORGANISATION OF A WEB-CONFERENCE ON ELECTROMAGNETIC RADIATION

From January 22 to January 25, 2018, EKLIPSE organised a web conference for experts from different disciplines to discuss the current knowledge on the effects of Electromagnetic Radiation (EMR) on wildlife. The aim was to highlight the current state of the art in this field, to identify knowledge gaps related to the impacts on different taxonomic groups, to discuss the technical aspects and methodologies used in current studies, and to identify and prioritise key research needs and policy recommendations. Lise Goudeseune was particularly active in organising this event, together with Estelle Balian, former member of the Belgian Biodiversity Platform. Lise contacted experts prior to the event to invite them as speakers or participants, set-up the programme together with colleagues from EKLIPSE, and arranged the technical side of the web-conference. Lise Goudeseune also coordinated the report of the conference which outlines the outcomes of the discussions that took place during

#### RESPONDING TO REQUESTS FROM POLICY & SOCIETY

through the European Knowledge and Learning Mechanism for Biodiversity and Ecosystem Services (EKLIPSE)



#### RESPONDING TO REQUESTS FROM POLICY & SOCIETY

through the European Knowledge and Learning Mechanism for Biodiversity and Ecosystem Services (EKLIPSE)





Report of the web conference on EMR the web conference and consists of feedback from the participants on the first document elaborated prior to the conference and a list of research needs and policy recommendations identified by the participants. More information on this conference can be found on <u>EKLIPSE website</u>, including the presentations of the speakers, the video recordings of the web conference and the current knowledge overview report.

## INVOLVEMENT IN EKLIPSE THIRD CALL FOR KNOWLEDGE

In April 2018, EKLIPSE launched its third open call for knowledge. Jorge Ventocilla, Biodiversity Expert of the Belgian Biodiversity Platform, was actively involved in EKLIPSE third call for knowledge throughout 2018. Jorge participated in promoting the open call by encouraging as many organisations as possible to post "questions" or "requests" to EKLIPSE. When the call ended, EKLIPSE received seven requests coming from a diversity of organisations (such as BiodivERsA, different DGs from the European Commission, NGOs, professional associations, and government departments). As member of the Secretariat, Jorge Ventocilla was then involved in the selection of the questions together with the Knowledge Coordination Body (KCB) and the Strategic Advisory Body (SAB) of EKLIPSE. For this third call for knowledge, a total of four requests were selected and Jorge Ventocilla was involved in the follow-up of this selection. One of these requests was "What is hampering the effectiveness of existing approaches that aim to restore biodiversity and ecosystem function and services?" introduced by BiodivERsA. Jorge Ventocilla was appointed, as member of the Secretariat, to work in close collaboration with the Experts Working Group to elaborate a response to this request. Jorge therefore ensured the coordination of the meetings and was in charge of overseeing the workflow of the Working Group. Started in May 2018, the work done for this request will be ongoing until mid-2019.

# REQUEST ON THE USE OF KNOWLEDGE ON BIODIVERSITY AND ECOSYSTEMS AT EU LEVEL

Resulting from the second call for knowledge launched in August 2017, a request from the European Commission - DG Research & Innovation (DG R&I) was put to EKLIPSE. The question: 'What needs to be done to better integrate research and knowledge on biodiversity and ecosystem services from the global to the European level, and vice versa?' focused on how to optimise the information on biodiversity and ecosystem services emanating from European funded projects and global initiatives; as well as how they could best absorb this knowledge and concretely use it at the European level. DG R&I was also interested in knowing how to make use of the knowledge produced at EU level and feed it into the global level. In response to this request, Jorge Ventocilla co-organised a workshop in collaboration with the European Commission on June 1, 2018. The goal of this workshop was to discuss the pathways to optimise the use of this type of research and elaborate key recommendations for DG R&I. The key recommendations of the workshop were to improve the interactions between EU and global level, as well as national and local level; to reinforce existing bodies that could fulfil these functions; and called for the establishment of a more formalised coordination at the EU level before engaging with the global level.

#### SCIENCE FORUM AT CBD-COP14

Resulting from the third call for knowledge, the European Commission requested support from EKLIPSE to organise a Science Forum during the CBD-COP14 in October 2018. Jorge Ventocilla prepared the format of the workshop, helped identifying the speakers, and was in support of the event organisation during the CBD-COP14. The two-day event was attended by 32 experts. The goal of the event was to understand and improve the links between European and global science & policy on biodiversity and ecosystem services. This side-event was following an event organised by the European Commission focusing on Nature-based Solutions that took place the day before and in which a representative of EKLIPSE intervened.

#### RESPONDING TO REQUESTS FROM POLICY & SOCIETY

through the European Knowledge and Learning Mechanism for Biodiversity and Ecosystem Services (EKLIPSE)



#### INVOLVEMENT OF EKLIPSE IN THE POST-2020 BIODIVERSITY STRATEGY

In September 2018, Jorge Ventocilla co-organised on behalf of EKLIPSE, together with AlterNet, a workshop in Peyresq, France. The event was entitled "How should the post-2020 European Biodiversity Strategy look like?' The workshop was attended by 16 people during which they brainstormed on the post-2020 Biodiversity Strategy. The workshop resulted in a series of action points and considerations for the Strategy. Furthermore, an outline for a conference to be co-organised by Alter-Net, EKLIPSE, and the European Commission mid-2019 in Ghent, Belgium was also elaborated.

#### **PROVIDING POLICY SUPPORT TO EKLIPSE**

Within EKLIPSE, Jorge Ventocilla also holds a key role in providing policy support to the mechanism. Concretely, Jorge works on policy outreach by informing policy-makers on the activities of EKLIPSE and on policy relevance, by ensuring that the outputs of EKLIPSE can be used by policy-makers. For instance, in September 2016, IUCN and the Swedish Board of Agriculture put a request to EKLIPSE on the effects of the Common Agricultural Policy (CAP) greening measures on biodiversity and related ecosystem services. Throughout 2018, Jorge Ventocilla engaged with DG AGRI (European Commission) on the evolution of the request and engaged with different MEPs to try to secure their participation at EKLIPSE Proof of Concept Conference. Jorge has also worked on several other occasions as a "policy filter" to ensure the policy relevance and engagement, thus facilitating the effectiveness of **EKLIPSE** outputs.

## REPORT OF THE EKLIPSE-JRC HORIZON SCANNING WORKSHOP

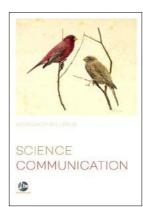
From 13 to 14 December 2018, EKLIPSE together with the Joint Research Center (JRC) organised a workshop entitled "Horizon scanning: from interesting to useful, from practice to impact". The event gathered professionals from different fields and sectors who all use or perform horizon scanning in their activities. The purpose of the workshop was to get insights from these practitioners on how to run such an exercise. The shared experiences



have been collected in the form of a practical guide for those wishing to develop a horizon scanning activity. Lise Goudeseune, Biodiversity Expert for the Belgian Biodiversity Platform, was particularly active in the organisation of this event and in the elaboration of the <u>practical guide</u> that was published in 2018. Estelle Balian, former member of the Belgian Biodiversity Platform played a key role in the organisation of the workshop.

#### COMMUNICATION WORKSHOP

On 14 November 2018, the Belgian Biodiversity Platform invited Belgian researchers to attend a workshop on science communication.The goal of this workshop was to provide scientists with tips and tools to improve their communication skills. Participants discovered how to share their research results using different techniques (e.g. storytelling) with different audiences (journalists, policy-makers, general



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public), and through various channels (research briefs, policy briefs, press releases, videos, social media). Following the event, the participants received a <u>Syllabus</u> on <u>Science Communication</u>.

Communication workshop syllabus

### CAPACITY BUILDING





INVASIVE ALIEN SPECIES

ECOSYSTEMS & SOCIETY

BIODIVERSITY & HEALTH

NATURE-BASED SOLUTIONS & CONSERVATION



# TOPICAL KNOWLEDGE **INCUBATION**



#### IMPLEMENTATION OF THE EU REGULATION ON **INVASIVE ALIEN SPECIES IN BELGIUM**

The Belgian Biodiversity Platform's expert on Invasive Alien Species (IAS), Sonia Vanderhoeven, is involved in the Belgian structures implementing the EU Regulation on IAS:

#### Scientific Council on IAS



#### **Invasive Alien Species** National Scientific Council

As member of the Scientific Council on IAS, Sonia Vanderhoeven actively participated in meetings of the Council which discusses the scientific aspects of invasive species in Belgium in relation to the EU Regulation on IAS. The need to assess the feasibility of the management of invasive species of EU concern in Belgium emerged in 2017. Indeed, the EU Regulation on IAS requires Member States to decide on the most appropriate, proportionate and cost-effective actions in their territory. Member States may decide, based on scientific evidence, not to apply eradication measures if (Art 18) at least one of the following conditions is met: (a) eradication is demonstrated to be technically not feasible because the eradication methods available cannot be applied in the environment where the invasive alien species is established; (b) a cost-benefit analysis demonstrates on the basis of the available data with reasonable certainty that the costs will, in the long term, be exceptionally high and disproportionate to the benefits of eradication; (c) eradication methods are not available or are available but have very serious adverse impact on human health, the environment or other species. In principle, with every formal notification of a species of EU concern in Belgium, decisions not to rapidly eradicate should be formally based on robust evidence.

The management of widely spread species is another requirement of the EU Regulation (Art 19). Within 18 months of an IAS being included on the Union list\*, Member States shall have in place effective management measures for those IAS of Union concern which the Member States have found to be widely spread on their territory, so

that their impact on biodiversity, the related ecosystem services, and, where applicable, on human health or the economy are minimised. Those management measures shall be proportionate to the impact on the environment and appropriate to the specific circumstances of the Member States.

In order to perform the manageability assessment of invasive species in Belgium, the Belgian Biodiversity Platform worked in collaboration with the National Scientific Secretariat on IAS, the Research Institute for Nature and Forest (INBO), and the Department of the Study of natural and agricultural environment (DEMNA). Together, these entities worked on:

- Conducting knowledge syntheses
- Mobilising experts on IAS at Belgian level
- Co-organising a workshop to discuss the manageability assessment.

#### Conducting knowledge syntheses

The first step towards the elaboration of the manageability assessment of IAS in Belgium was the elaboration of management strategies and scenarios based on scientific literature describing the methods of management for each of the 40 species of EU Concern under evaluation.

#### Mobilising experts at Belgian level

Since its inception in 2006, the Belgian Forum on Invasive Species (BFIS) initiated and facilitated by the Belgian Biodiversity Platform, has been very active in providing expertise on IAS when required. For this manageability assessment, this informal network of experts was mobilised. We organised an online participatory process involving more than 40 experts with experience in species management using an adaptation of the UK Non-Native Risk Management scheme (NNRM). NNRM uses semi-quantitative response and confidence scores to assess key criteria linked with management feasibility: effectiveness, practicality, cost, impact, acceptability, window of opportunity and likelihood of re-invasion.

#### Co-organising a workshop to discuss the assessment

On December 19, 2018, the Belgian Biodiversity Platform, the Département d'Etude du Milieu Naturel et Agricole

#### INVASIVE ALIEN SPECIES

through the Belgian Forum on Invasive Species



\*The Union List: The species included on the Union list are subject to restrictions and measures set out in the Regulation. These include restrictions on keeping, importing, selling, breeding and growing. Member States are required to take action on pathways of unintentional introduction, take measures for early detection and rapid eradication of these species, and to manage species that are already widely spread in their territory.

#### INVASIVE ALIEN SPECIES

through the Belgian Forum on Invasive Species



(Service Public de Wallonie - DEMNA), the Research Institute for Nature and Forest (INBO) and the National Scientific Secretariat on Invasive Alien Species jointly organized a workshop building on the results of the Belgian manageability assessment of IAS. The workshop brought together field managers and species specialists. The purpose of this day was to gather the opinions of managers on the objectives and management strategies to be put in place in support of the implementation in Belgium of the European Regulation on invasive alien species. The different opinions expressed during the workshop will be taken into account by the competent authorities in Belgium during the decision-making process concerning the management of invasive alien species of Union concern.

National Committee on IAS



Invasive Alien Species National Committee

As observer of the National Committee on IAS, Sonia Vanderhoeven attended meetings of the Committee which is composed of representatives of the different Belgian competent authorities adopting Belgium's position on the Union List and its update. In this regard, Dr Vanderhoeven provided, when requested, clarifications on the scientific work produced by the Scientific Council on IAS. Furthermore, she also provided administrative support to the Committee, for instance, by preparing a case study and being part of the panel interviewees for the selection of a new recruit for the National Scientific Secretariat on IAS.

#### National Scientific Secretariat on IAS

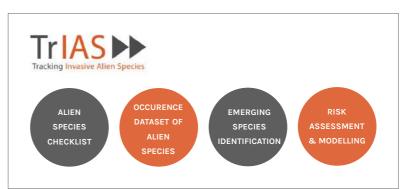


Invasive Alien Species National Scientific Secretariat

In 2018, we provided support to daily work of the National Scientific Secretariat on IAS. For instance, the Secretariat worked on identifying pathways of unintentional introduction of IAS in Belgium and the Belgian Biodiversity Platform provided support for this work throughout 2018. We also provided communication support to the Secretariat, the Council and the Committee.

Furthermore, as Belgian representative in the EU Scientific Forum on IAS, Sonia Vanderhoeven actively participated in meetings of the Forum, which is composed of representatives of the scientific community from EU Member States. In 2018, the work performed for the EU Scientific Forum on IAS mainly revolved around the review of EU risk assessments submitted by Member States and the European Commission in the course of the year. Sonia Vanderhoeven assessed the pertinence of the assessment of several species proposed by other Member States from a scientific quality perspective.

#### TRIAS



TrIAS is a Belspo-funded project (2017-2020) focusing on building an open data-driven framework to support policy on invasive species. In 2018, the Belgian Biodiversity Platform, via Sonia Vanderhoeven, was involved in the project. We played an important role in safeguarding the mission of TrIAS, ensuring the vision of the project and the general coherence of it was at the core of all activities, and was shared by all partners. In 2018, the work package focusing on establishing an alien species checklist for Belgium was finalised by INBO. Sonia Vanderhoeven participated in several meetings and provided ad-hoc support for the technical aspects of IAS and for the coordination of the work. The work package focusing on establishing an occurrence dataset of alien species in Belgium was also produced by INBO, and Sonia Vanderhoeven actively participated in meetings related to this task, while Maxime Coupremmane, the Belgian Biodiversity Platform data liaison officer for Wallonia

#### INVASIVE ALIEN SPECIES

#### through the Belgian Forum on Invasive Species



provided support in publishing data on alien plants for Wallonia (see the Open Data section of this report). The work package focusing on the development of indicators to identify emerging species started in 2018 and was jointly conducted by INBO and other partners including and the Belgian Biodiversity Platform. Activities included the review of existing IAS indicators and the establishment of Belgian indicators. Once these indicators will have been fully established, risk assessments will be performed throughout 2019-2020, using the Harmonia+ protocol (which was developed by the Belgian Biodiversity Platform in 2015). The work package focusing on risk assessments and modelling also started in 2018 and is led by the Belgian Biodiversity Platform and the University of Gent.

#### **RISK ASSESSMENT**

Following the European Decision 1313/2013/EU, EU Member States must perform an integrated risk management plan every three years, a risk assessment



and then report back to the European Commission. In 2018, the federal Crisis Center called on the expertise of the Belgian Biodiversity Platform to contribute to the national risk identification related to natural hazards. This was based on the implementation of a Delphi methodology, aiming at achieving a consensus through an interactive process, with regard to the evaluation of the likelihood and impact of different natural risks including biological invasions. In this regard, Sonia Vanderhoeven participated in online and face-to-face consultations to provide the required expertise related to invasive alien species risk assessment. This contribution will be integrated into the strategy and priorities of risk assessment pertaining to biological invasions of the federal Crisis Center.

#### LIFE PROPOSAL 'RIPARIAS'

In 2018, Sonia Vanderhoeven took part in the elaboration of a LIFE Proposal: «Reaching Integrated and Prompt Action in Response to Invasive Alien Species» (RIPARIAS). RIPARIAS develops an innovative workflow for decisionmaking in IAS management. This makes it possible to translate national management objectives into concrete actions by optimising the profitability of the actions and thereby meeting the obligations of the European Regulation on IAS. The project consists in developing new decision support tools to facilitate the monitoring and fight against IAS



targeted by the European Regulation. These tools will be tested across transregional pilot catchment basins.

The RIPARIAS consortium is composed of:

- The different competent authorities responsible for the implementation by Belgium of the European regulation: Brussels Environment, the Public Service of Wallonia (SPW) and Agentschap voor Natuur en Bos (ANB), as well as the main stakeholders involved in the management of IAS in riparian habitats (the Walloon River and Vlaamse Milieumaatschappij contracts).
- · Regional research institutes responsible for the monitoring and management of biodiversity data: Instituut voor Natuur en Bos Onderzoek (INBO) and the Department of Natural and Agricultural Research (SPW-DEMNA)
- The ULg regarding the communication of the project
- The Belgian Biodiversity Platform, with its expertise in the development of information systems, online decision support tools and communication activities related to IAS.

The Brussels region is coordinating the project administratively in partnership with a Dutch research office (Bureau Buiten) specialising in the design and administrative management of European projects. The submission of the concept note resulted in the pre-selection of the project on October 24, 2018. A full proposal will be submitted to the European Commission by January 30, 2019.

In 2018, the activities of BEES included the organisation of three capacity building/networking events:

- The BEES field trip in Sonian Forest
- The BEES Young Scientist Day
- The BEES Christmas Market

#### ECOSYSTEM & SOCIETY

through the BElgian *Ecosystems and Society* Community of Practice



They were organised by Sander Jacobs, BEES Coordinator, Pierre Huybrechts, Communication Officer of the Belgian Biodiversity Platform, and BEES Community members.

#### THE BEES FIELD TRIP

The BEES field trip was organised on May 9, 2018 in Sonian Forest. Based on requests from our members, it offered the opportunity for researchers and practitioners to get out of their offices, into the field, while enjoying the networking occasion. Several short pitches by practice professionals punctuated the walk in the forest, covering topics such as urban forests, recreation pressure, cultural heritage, biodiversity conservation, wood production, climate, and how to combine this in a complex governmental context. The walk was followed by a snack outside the Groenendael castle.



Participants to the BEES Field Trip in Sonian Forest

#### THE BEES YOUNG SCIENTIST DAY

The third BEES Young Scientist Day took place on October 5, 2018, hosted by the University of Hasselt. It was an informal, interactive day focused on developing interdisciplinary cooperation and exploring transdisciplinary opportunities. A ranger took the group on a fieldtrip in "Hoge Kempen" National Park. Participants got to share experiences with short inspiring presentations, and had an interactive "speed dating" session, all while enjoying the nature and scientific atmosphere. A keynote presentation by Dr Natalie Beenaerts, director of Ecotron & Field Research Centre was held in the afternoon, followed by student presentations. A live network mapping game was then organised at the end of the day.



Dr Nathalie Beenaerts, director of Ecotron, presenting the research center during the BEES Young Scientist Day 2018.

#### THE BEES CHRISTMAS MARKET

The BEES Christmas Market gathers researchers and practitioners working on the topic of 'ecosystems and society' in Belgium. Research institutes and academic groups, administration projects and local initiatives on nature, forestry, agriculture, ecosystem services, environmental justice, green economy etc. meet in a personal and relaxed atmosphere, learning from each other and strengthening the community.

This year, the BEES Market took place on December 18, 2018, hosted by INBO and ANB at the Herman Teirlynck building in Brussels. With over 100 participants, the Market was the opportunity to discover almost 20 stands of research projects and administrations. Several workshops were also organised on a diversity of topics: science-policy communication; reconnecting with nature; ecosystem trade-offs and conflict management; and mapping the socio-economic impact of spatial scenarios.

#### ECOSYSTEM & SOCIETY

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#### INVOLVEMENT IN EUROPEAN AND GLOBAL **INITIATIVES**

Sander Jacobs, coordinator of the BEES Community, was also actively involved in IPBES throughout 2018 (see IPBES section of this report). Furthermore, Sander Jacobs also represents Belgium in the EU and global initiatives on ecosystem services and socio-ecological initiatives. In this regard, Sander provided active input in MAES working group and in the ESMERALDA project. Sander attended meetings of these initiatives in which he channelled concerns from Belgian stakeholders and provided suggestions. Sander was also actively engaged in meetings of the Programme on Ecosystem Change and Society (PECS) of Future Earth for which he ensured contacts with the Belgian research community. Sander Jacobs also wrote an opinion paper based on the PECS conference 2018 in which he describes the need for plural valuation and the power of scientists to influence policy, as well as the importance of researchers taking the responsibility to actively and duly inform policy-makers of their findings. The paper is planned to be published in 2019.

Sander Jacobs also provided input in the Ecosystem Services Partnership (ESP) network as "national chapter" as well as Valuation Working Group lead. Sander also acts as ESP Steering Committee co-Chair in which he facilitates the decision-making process and governance. In 2018, elections were organised to re-elect the entire Steering Group and Executive Committee, thereby instauring new rules to make it more democratic and add regional and gender quotas. Sander Jacobs also worked on creating links between the ESP network and IPBES. Together with other partners, Sander organised an IPBES session attended by over 50 participants in San Sebastian in order to discuss the science-policy interaction between ESP and IPBES. The report of this meeting was sent to the IPBES Multidisciplinary Expert Panel meeting on science-policy interfaces that was held the next day, and was used during their discussions.

Facilitated by the Belgian Biodiversity Platform since 2011, the Belgian Community of Practice on Biodiversity & Health (COPBH) works on three main areas:

- Assess, improve and mainstream the current state of knowledge.
- Contribute to integrated knowledge.
- Contribute to integrated policy and practice actions.

#### **BELGIAN NETWORKING EVENT**

In 2018, the Belgian Community of Practice on Biodiversity & Health, which is coordinated by Hans Keune, was particularly active in organising, in collaboration with Antwerp University, the Province of Antwerp and a series of other partners, a Belgian networking event. The event, entitled "Natuur op verwijzing!" took place on October 4, 2018 at the Zoo of Antwerp.

The event, which was attended by 170 participants, was organised around a series of workshop sessions on different topics:



The main objective of this networking event was for attendees to get to know experts from different sectors (e.g. natural sciences and health sectors) in order to increase the dynamics and collaboration across various disciplines working in the field of biodiversity and/or health. Furthermore, the event also intended to provide participants with updates on scientific knowledge, and to inform each other on thematic issues (e.g. benefits of nature vs. health risks of nature). Through matchmaking of participants in interactive workshops, the intention of the event was also to foster potential future collaborations.

#### **BIODIVERSITY &** HEALTH

through the Belgian Forum on Invasive Species



All the discussions took place in Dutch as most participants were Dutch-speaking. The organisation of the event was preceded by several brainstorms sessions among key experts in order to assess what type of event was needed and how to best organise it, as well as the forming of a co-organising team and a more formal structure to support the financial aspects of the meeting.

#### BIODIVERSITY & HEALTH

#### through the Belgian Forum on Invasive Species





Workshop session during the 'Natuur op verwijzing!' event

# SUPPORT TO THE BELGIAN SUPERIOR HEALTH COUNCIL

In 2018, Hans Keune acted as Rapporteur to a temporary expert committee on nature-health of the Belgian Superior Health Council which is an independent advisory body that produces scientific advisory reports aiming at providing guidance to decision-makers and health professionals. Hans Keune supports the chair and co-chair of the Committee in making sure that the work produced by experts for the advisory report is well on track. The goal of the ongoing advisory report is to highlight the importance of nature for health so that interested parties increasingly understand the importance of nature for their practice. By producing a review of the scientific literature about Nature and Health linkages in an urban context, the knowledge will be of particular interest to the professionals working in the health and spatial planning sector.

# EVENT ON ONE HEALTH-ECO HEALTH AT EUROPEAN LEVEL

From September 10 to 12, 2018, Hans Keune attended the European OneHealth-EcoHealth Final Action conference at Bologna University, which was organised by the Network for Evaluation of OneHealth (NEOH). The Belgian Community of Practice on Biodiversity & Health participated in the co-organisation of the meeting. The goal of the meeting was the finalisation of the COST Action on OneHealth-EcoHealth through several keynote presentations. There were also discussions in having the NEOH becoming the European Chapter of the ECOHealth Alliance, a global environmental health non-profit organisation dedicated to protecting wildlife and public health from the emergence of disease. Furthermore during the meeting the importance for IPBES investing more dedicated attention for nature - health linkages was discussed. This led to NEOH submitting a proposal for a biodiversity & health assessment for the second work program of IPBES.



Participants to the European OneHealth-EcoHealth Final Action conference

### PARTICIPATION IN THE RETHINKING BIODIVERSITY GOVERNANCE INITIATIVE

In January 2018, Hans Keune participated in the second meeting of the Rethinking Biodiversity Governance network in Paris, at the IIDRI institute. The network is mainly focusing on social scientific governance aspects of the main challenges facing the current international biodiversity regime, and intends to map out a course of action for the future. A key objective for the network, which

was initiated by programme leader Marcel Kok at the Netherlands Environmental Assessment Agency (PBL), is to share knowledge, fill research gaps, and offer concrete solutions and policy recommendations for reforming today's biodiversity governance. Specifically, the network will target the upcoming process of drafting a new post-2020 Strategic Plan for the Convention on Biological Diversity (CBD). As social scientist, Hans Keune will be part of this network that will help re-think about what is needed to improve the implementation of international environmental agreements.

#### NATURE-BASED SOLUTIONS & CONSERVATION

through the National Focal *Point of the* International Union for the Conservation of Nature (IUCN)



#### ACTIVITIES WITHIN THE IUCN NATIONAL **FOCAL POINT**

Acting as National Focal Point to IUCN, the Belgian Biodiversity Platform provided regular updates to IUCN members and the Belgian scientific community on activities launched by IUCN. We also contributed to regular interactions and exchange of best practices within the 'Working Group of Regional and National Committees'. In 2018, Hilde Eggermont participated to to the EU Policy Advisory Group. This group provides advice to the Director of the IUCN European Regional Office in Brussels on matters relating to EU policy. The Advisory Group synthesised IUCN science, knowledge products and standards into policy relevant positions and messages. It also advised on themes and priorities for events. Furthermore, the EU Policy Advisory Group also assisted the IUCN Regional Office by liaising with National Committees to advise European institutions on conservation priorities. In her capacity as Regional Councillor West Europe from 2016 to 2020, Hilde Eggermont was also active throughout the year as part of the Governance and Constituency Committee dealing with IUCN governance and membership issues. She also liaised between IUCN members and the Secretariat in the process towards the establishment of an Interregional Committee for Europe, North & Central Asia. Furthermore, Hilde Eggermont co-authored the IUCN technical assessment on synthetic biology and biodiversity conservation and participated in the dedicated Task Force.

DATA MOBILISATION & PUBLICATION

DATA ACCESS & USAGE

CAPACITY BUILDING

STRATEGIC INPUT ON OPEN DATA

I.T. MAINTENANCE AND SUPPORT



#### **OPEN DATA**

## DATA MOBILISATION & PUBLICATION

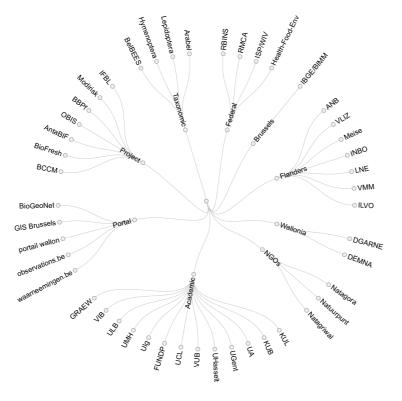
through the Global Biodiversity Information Facility (GBIF)



Open Data contributes to science reproducibility and it allows other scientists to re-use research data. The Global Biodiversity Information Facility (GBIF) is an international network and research infrastructure funded by the world's governments and aims at providing anyone, anywhere, open access to data about all types of life on Earth. Belgium is a member of GBIF since its beginning in 2001 with the Belgian Biodiversity Platform acting as Belgian GBIF Node. Our current Open Data team is composed of five team members: two Biodiversity Data Acquisition Manager (Dimitri Brosens for Flanders, Maxime Coupremanne for Wallonia), a System Administrator (Julien Cigar), an IT Expert (Nicolas Noé) and the GBIF Node Manager (André Heughebaert).

#### **DATA MOBILISATION**

In 2018, our Open Data Team worked on mobilising data from a series of Belgian data owners (see graph). For the GBIF 'Biodiversity Information for Development' (BID) programme, we collaborated with data owners from several countries of Africa.



Dendrogram of Belgian Biodiversity Data Owners by category

The role of the Belgian Biodiversity Platform is to help data providers understand the added-value of open data, support them in prioritising the digitisation work or the data capture, and help them overcome the barriers to open data publication. It also advises on Data Management Plans describing how researchers will deal with data throughout the lifetime of their project. Data centers are one of the key audience of the Belgian Biodiversity Platform as they hold a wide variety of data yet need support to overcome barriers to data publication such as administrative reluctancy, support in developing data policy, validation of data, verification of taxonomy, etc. The workflow inherent in data mobilisation may vary from one data owner to another, but the overall process consists of similar steps. The examples of the macroinvertebrates dataset (in Flanders) and the Invasive Alien Species dataset (in Wallonia), both published in 2018, are presented here in order to illustrate the process of data mobilisation.

#### • Macro-invertebrates dataset

One of the dataset published in 2018 for Flanders was the Flemish Inland Macroinvertebrates dataset comprising 282,309 records of 210 observed taxa from 4,140 monitoring sites located on 657 different water bodies, collected during 22,663 events.

Dimitri Brosens, Biodiversity Data Acquisition Manager for the Belgian Biodiversity Platform, was in charge of overseeing the publication of this dataset. First, through our collaboration in the Belspo-funded SAFRED project, Dimitri Brosens met with members of the project to discuss the eventual publication of this dataset. Discussions then took place with the Flanders Environment Agency (VMM) on how exactly the data had to be mapped and published. Eventually, the process ended with the publication of this data paper entitled "The inland water macro-invertebrate occurrences in Flanders, Belgium" (Rudy Vannevel, Dimitri Brosens, Ward De Cooman, Wim Gabriels, Frank Lavens, Joost Mertens, Bart Vervaeke). Also, Dimitri Brosens was the invited speaker during the VMM Biodata day where the possible publication of other VMM datasets were discussed. In 2019 we foresee some more VMM datasets to be published.

As Rudy Vannevel, Associate Director at Flanders Environment Agency (VMM) mentioned in our Biodiversity Newsflash 81, the Belgian Biodiversity Platform expertise in data mobilisation was key to ensure the process was successful:

## DATA MOBILISATION & PUBLICATION

through the Global Biodiversity Information Facility (GBIF)



"The recent upload of the VMM macro-invertebrate dataset into the Global Biodiversity Information Facility (GBIF) responds to an old aspiration and failing attempt in the 1990s to distribute our data to the public and scientific community and to safeguard our biota data at a higher level. It made clear that, with many smaller and larger players in the field, this couldn't be done without the organisational structure the Belgian Biodiversity Platform offers. Although VMM disposes of a large biological dataset, biota is only one of the many topics it deals with. So, there is a mutual interest to share data and experiences."

Biodiversity Newsflash 81 - July 2018

#### • First DEMNA occurrence dataset on GBIF

One of the datasets published in 2018 for Wallonia was the 'Exotic plants occurrences in Wallonia' dataset, compiling 81,889 occurrences from 798 non-native plants taxa. This dataset is actually the first one that has been successfully published by the Département d'Etude du Milieu Naturel et Agricole (SPW-DEMNA), and is a contribution to the TrIAS project<sup>1</sup>.

Maxime Coupremanne, Biodiversity Data Acquisition Manager for the Belgian Biodiversity Platform, was in charge of overseeing the publication of the dataset. The first step for this publication was to to advocate the urgent need for exotic plant species data by presenting the TrIAS project and the Walloon data gap on GBIF to the 'GT-Flore', an informal group bringing together DEMNA experts and key partners. Then, a strategic approach to minimise the limitations (mainly recognition of exotic taxa, data validation and confidentiality) of publishable content was discussed and validated in collaboration with the working group. The key steps of the strategy were: -Smooth and clean the nomenclature used in DEMNA databases (flora) to prepare for recognition of alien species.

-Isolate occurrences of non-native plants by comparing them with a reference list of exotic species (Verloove et al., 2018).

-Since data validation is a prerequisite for data sharing by DEMNA, a massive validation was carried out by identifying the data encoders whose expertise is recognised by the Working Group (composed of DEMNA experts on plants and key partners working with DEMNA).

-Data confidentiality: a limitation imposed by the encoder reducing the precision with which the data is shared was also removed after several individual meetings during which the added-value of data publication was further explained.

-All the preparatory steps were performed in close collaboration with the experts of the Working Group. Finally, the project dataset and description obtained were presented to the group for a last verification before the publication, as well as after it had been published.

#### **DATA PUBLICATION**

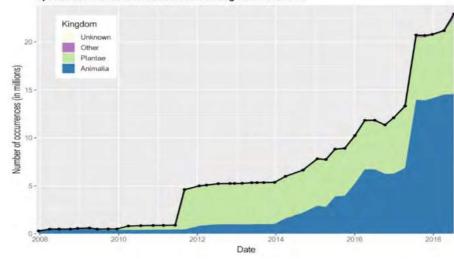
Based on the work done throughout the data mobilisation process, our Open Data Team then focuses on publishing data online. As GBIF Belgian Node, all our activities of data publication are integrated into the GBIF global data portal: see the <u>GBIF Belgium Summary page</u>.

At the European level, we produced a comparison of data published between Belgium and the three neighbouring countries (France, Germany and the Netherlands). Belgium publishes relatively less data on Mammals, Amphibians, Reptiles, Gymnosperms and Mosses. For all other taxons, Belgium publishes more data than its neighbours. For Belgium, we also identified gaps in publication of Fossil specimens, Historical data (before 1900) and Literature based occurrences.

<sup>1</sup> TrIAS stands for 'Tracking Invasive Alien Species'. The project aims to develop the establishment of a data mobilisation framework for alien species data from diverse data sources and the development of data-driven procedures for risk evaluation based on risk modelling, risk mapping and risk assessment.<u>More information</u>.

Over the years, we have seen an increase of data publication, in terms of the number of occurrences records published by Belgian institutions:

Species occurrence records accessible through GBIF over time



#### DATA MOBILISATION & PUBLICATION

through the Global Biodiversity Information Facility (GBIF)

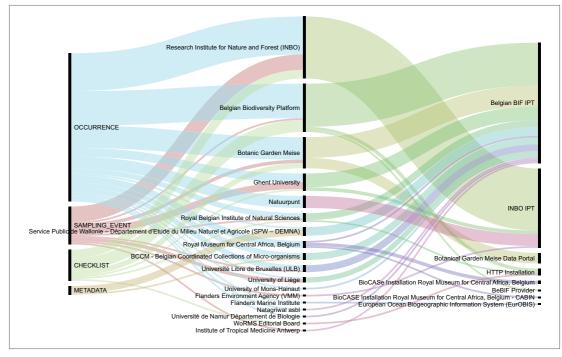


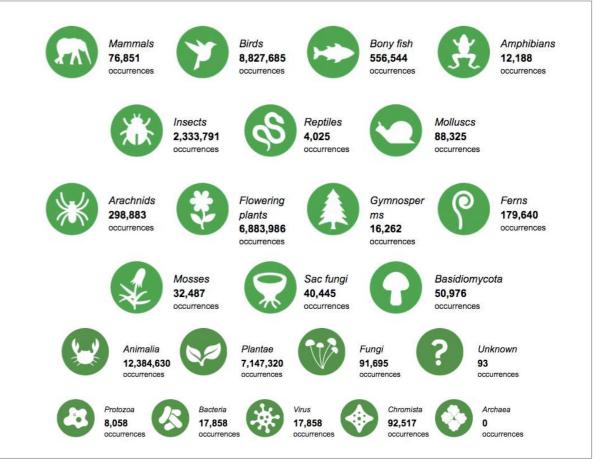
Number of records published by institutions in Belgium, categorised by kingdom. Source: GBIF Country Report 2018 for Belgium

In 2018, there were 19 data publishers from Belgium that published data on GBIF, and we reached a total of over 20 millions published occurrences, 114 published datasets, and 232 countries, territories and islands covered by data from Belgium.



In 2018, institutions from Belgium published over 2.3 millions new occurence records. Source: GBIF Country Report 2018 for Belgium





Alluvion graph showing the 110 Belgian datasets published through GBIF by: type of data (left hand); Publishing Organisation (center); Technical Installation, e.g. IPT (right hand). Flows sizes refer to the number of datasets (not the number of records).

Examples of occurrences from Belgian scientists published on GBIF in 2018 Source: GBIF Country Report 2018 for Belgium

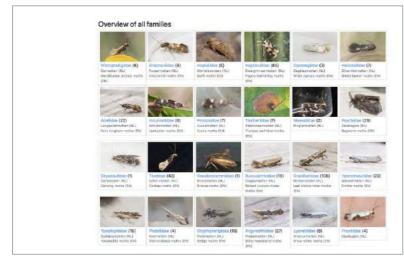
#### **LEPIDOPTERA ATLAS**

## DATA MOBILISATION & PUBLICATION

through the Global Biodiversity Information Facility (GBIF)



One of the key activities of 2018 in data publication was the work done for the Lepidoptera Atlas. Since 2003, the Flemish Entomological Society maintains the Online Catalogue of the Lepidoptera of Belgium, a widely used website that provides valuable information (species description, distribution in Belgium, pictures, references...) about circa 2600 species of lepidoptera. This website is an online version of the paper catalogue published in December 2016. The Flemish Entomological Society contacted the Belgian Biodiversity Platform in order to improve the IT development of the website. Prior to our action, the website consisted of static HTML pages managed individually and manually, which resulted in tedious and error-prone work when updating data. In parallel, the Flemish Entomological Society also managed a more rich (offline, MS-Access-based) database with information on about 240.000 specimens including vernacular names, detailed locations, and other type of information.



Catalogue of the Lepidoptera Atlas developed by the Belgian Biodiversity Platform for the Flemish Entomological Society.

In 2018, the Belgian Biodiversity Platform provided support to the Flemish Entomological Society by developing a dynamic Online Catalogue of the Belgian Lepidoptera with several new features such as addition of multimedia elements, addition of information on geographic distribution, species description, vernacular names, flight periods, etc. The website can now be updated by a small group of taxonomic experts, who can log in to the website and use a specific administration interface to manage the database. The data (checklists and occurrences) is also published to GBIF and the updates are also directly synchronised on GBIF. This tool therefore provides three main uses: a specific data management system for the Flemish Entomological Society, a public website for sharing the information about lepidoptera of Belgium and a gateway for data publication to GBIF. The Belgian Biodiversity Platform also provides the hosting of the website and database.

Willy De Prins, Secretary of the Flemish Entomological Society, explains the added-value of the involvement of the Belgian Biodiversity Platform in the development of the Lepidoptera Atlas in our Biodiversity Newsflash of October 2018:

> "For many years, the Flemish Entomological Society maintained an offline database containing all these data. Making this information available online to the scientific community was important to us, and this became possible with the help of the Belgian Biodiversity Platform. After a few meetings with Nicolas Noé, IT expert of the Belgian Biodiversity Platform, a first version of the website was created with the possibility for specialists to make changes to the data online. Suggestions from these users have considerably improved the website and further improvements are still going to be implemented in the near future. The website was officially launched on 9 September 2018 during a meeting of the Flemish Entomological Society and it is now available to all." Biodiversity Newsflash 83 - October 2018

Besides data mobilisation followed by the more technical step of data publication, the Open Data team also supports the networking and collaboration between different people and institutions working with biodiversity data in Belgium. An example of this type of activity is the transfer of Invasive Alien Species (IAS) data between the Département d'Etude du Milieu Naturel et Agricole (SPW-DEMNA) and the Instituut voor Natuur en Bosonderzoek (INBO). This work was done under the request of the European Alien Species Information Network team (EASIN), asking the European member states to provide national baselines for distribution data of invasive alien species of Union Concern. The establishment and the update of this baseline required the preparation, the transfer and the integration of a mass of data; all of which was facilitated by the Belgian Biodiversity Platform Open Data team (for the Walloon side) using the same standards as those used in GBIF (Darwin Core). The 2018 update of this baseline has been <u>published on Zenodo</u>.

#### DATA ACCESS & USAGE

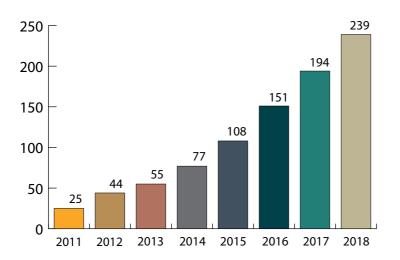
through the Global Biodiversity Information Facility (GBIF)



Once published, the data can be accessed and used by any interested party. In 2018, there were 16 peer-reviewed articles using GBIF-mediated data by co-authors based in Belgium.

**DATA ACCESS & USAGE** 

Also, we have seen an increase of data usage over the years as the number of peer reviewed scientific papers with Belgian authors referring to GBIF meditated data has been increasing since 2011.



Number of peer reviewed scientific papers with Belgian author(s) referring to GBIF mediated data. Source: <u>GBIF.org country pag0e</u>

In 2018, we were involved in <u>BIREME Project</u> looking at data usage by policy-makers. BIREME is an initiative of a few GBIF nodes, including the Belgian node. Funded by GBIF under the Capacity Enhancement programme, the BIREME Project intends to produce an assessment in five countries (Belgium, France, Ireland, Norway and Portugal) of the reporting mechanisms for the Birds Directive, the Habitat Directive, and the IAS Regulation.

By detailing national reporting processes and data flows in several European Union member states, this project explores how changes to GBIF tools and procedures could streamline and improve biodiversity reporting across the region. The project will identify and summarise best practices and share the resulting recommendations with both the GBIF Secretariat and other European Nodes. Given that the reports to the EU are done every 6 year, after which the data is aggregated and the raw data is not available anymore, the goal for GBIF is to retrieve this data and publish it online. This could be done on a yearly basis so that the EU could get data every year instead of every 6 year. In Belgium, André Heughebaert, who is the leader of the project, interviewed six individuals to know more about the way reporting is done. The main conclusion of these interviews is that the last Birds and Habitats reporting cycles did not use GBIF mediated data. The **Bireme Study** produced a series of recommendations to improve this in the future, including, for the national entities in charge of reporting, to cite all sources that were used to assemble the country report, preferably through DOIs when data sources are already public; and to describe report preparation, data aggregation and cleaning processes as well as tools used and experts involved in order for other organisations to be able to replicate the process and/ or publish the data online in an open and free manner.

#### **CAPACITY BUILDING**

#### CAPACITY BUILDING IN BELGIUM

In 2018, the Belgian Biodiversity Platform organised two data workshops to build the capacity of Belgian scientists on data:

#### Data Cleaning workshop

The 2-day Data Cleaning Workshop took place on 27-28 August 2018 and primarily targeted biodiversity researchers who took part in Belspo funded projects. Participants learned about open data principles and data cleaning tools. They also had the chance to practice with exercises focusing on exploring Data with Spreadsheet, <u>QGIS</u> and <u>OpenRefine</u>; cleaning taxonomical, temporal, geographical and possibly other fields; organising Data to minimise errors; and describing data with detailed metadata. Researchers therefore learned how to document and clean their research data with the goal to increase data quality and ultimately to make it reusable for further research.

#### CAPACITY BUILDING

through the Global Biodiversity Information Facility (GBIF)





Data cleaning workshop organised by the Belgian Biodiversity Platform on 27-28 August 2018.

#### Data Use workshop

The 2-day Data Use workshop took place on 20-21 September 2018 and was mainly intended for students and young scientists working in the field of biology. The workshop was an opportunity to learn about GBIF, open data principles, data management and data visualisation tools. Through practical sessions, the participants discovered data on GBIF.org portal; learned how to download the data in CSV and Darwin Core format; learned about Data Citation, Licenses and DOIs; discovered the visualisation of data with Spreadsheet, QGIS and R; they learned how to filter the Data, understanding fitness-foruse; and they also discovered ecological Niche Modelling with Maxent.

#### CAPACITY BUILDING ABROAD

In 2015, the GBIF Secretariat officially started Biodiversity Information for Development (BID), a multi-year, €3.9 million programme funded by the European Union with the aim of increasing the amount of biodiversity information available for use in scientific research and policymaking in the 'ACP' nations of sub-Saharan Africa, the Caribbean and the Pacific. One of the main implementation mechanisms of the programme is a set of public calls to support projects directly contributing to the objectives of the programme. Mentors from all over the world act on behalf of GBIF to animate these workshops. The Belgian Biodiversity Platform Open Data Team is composed of three GBIF mentors: André Heughebaert, Nicolas Noé and Dimitri Brosens. In 2018, we were mentor in three workshops:

#### Workshop on data publication - Cape Town

From 9 to 13 April 2018, Dimitri Brosens (Data Acquisition Manager for the Belgian Biodiversity Platform) acted as GBIF Mentor in the data publication workshop held in Cape Town, South Africa. The workshop took place at the Kirstenbosch Botanic Gardens of Cape Town and was attended by over 70 participants coming from countries of sub-Saharan Africa. This workshop contributed to enhance the capacity of the project teams in Africa by demonstrating how mobilised primary biodiversity data can be used in the development of information products that feed into national policy-making processes. The workshop had a strong focus on the technical aspects of data use—in particular with respect to ecological niche modelling and the use of GBIF for Red Listing using the IUCN Categories and Criteria. Participants were also introduced to the decision making process and how these information products can be effectively integrated within it.



Mentoring workshop on data publication in Cape Town.

#### Workshop on data publication - Montenegro

From 23 to 26 April 2018, Nicolas Noé (IT Expert for the Belgian Biodiversity Platform) acted as GBIF Mentor in the Capacity Enhancement Workshop about Biodiversity Data Mobilisation targeted at countries from the Balkan peninsula. The workshop was held in Podgorica, Montenegro and was attended by 15 participants. The workshop focused on data publication: it first presented what GBIF is, what data publication is, and what type of data can or cannot be published on GBIF. There were also sessions organised around project management: how to organise projects related to data mobilisation project planning and management (timing, people, equipment, etc). The workshop also offered practical exercises on data publication: participants could train on exercises related to data capture, data transformation and cleaning and data publication.



Participants of the mentoring workshop on data publication in Montenegro.

Following mentoring workshops, the Belgian Biodiversity Platform provides technical support to participants through online communication. In this regard, our Open Data Team provides support to participants after each workshop by responding to questions, especially related to practical exercises. Furthermore, we also remain the contact point for participants to previous workshops when they have questions or need support to publish their data online. We also help by being IPT's administrators to Cameroon and Ivory Coast. The overall goal of such mentoring activity is to raise the awareness of GBIF, to emphasise the importance of such initiative, and to provide technical information and build the knowledge of participants on how to actively contribute to GBIF when it comes to data publication.

#### STRATEGIC INPUT TO GBIF

From 14 to 16 May 2018, the 10th GBIF European Nodes Meeting took place in Tallinn, Estonia. The objectives of the meeting were for the GBIF European nodes to update each other on current and planned GBIF-related activities and collaboration opportunities. There were several thematic discussions (establishing and developing Nodes, Open Science Ambassadors, communication, etc.). A seminar about global and national biodiversity data portals also took place during the meeting.

As Chair of the Nodes Committee, Andre Heughebaert is also a member of the GBIF Executive Committee. Being the Chair of the Nodes Committee is a key position in terms of GBIF Governance, implementation of the Strategic Plan and the annual Work Programme and the management of the budget. It is also essential to ensure a good communication between the Nodes managers and the Secretariat.

#### **I.T. MAINTENANCE AND SUPPORT**

Throughout 2018, our Open Data Team continued republishing existing datasets with recent tools and standards and maintained 32 websites, aside from our main website. Those other websites are mainly data portals that were created for scientists to publish their data in an open manner.

#### CAPACITY BUILDING

through the Global Biodiversity Informatior Facility (GBIF)



#### STRATEGIC INPUT ON OPEN DATA

through the Global Biodiversity Information Facility (GBIF)



#### MANAGEMENT TEAM



Dr Aline VAN DER WERF Manager

#### OUR TEAM

In 2018, our team was composed of:



Dr Hilde EGGERMONT Coordinator & Biodiversity Expert



### SCIENTIFIC TEAM



Dr Sander JACOBS

**Biodiversity Expert** 

Dr Hans KEUNE **Biodiversity Expert** 

Dr Sonia VANDERHOEVEN **Biodiversity Expert** 



Jorge L. VENTOCILLA **Biodiversity Expert** 

#### **OPEN DATA TEAM**



Ir André HEUGHEBAERT IT Team Coordinator



Dimitri BROSENS Data Acquisition Manager



Julien CIGAR System Administrator



Maxime COUPREMANNE Data Acquisition Manager



Nicolas NOE IT Expert

#### COMMUNICATION TEAM



Angélique BERHAULT Communication Coordinator



Pierre HUYBRECHTS **Communication Officer** 

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#### OUR PARTNERS

In 2018, our partners included:



We are also very thankful to our host institutes for hosting our team in their premises:

• The Royal Belgian Institute of Natural Sciences (RBINS)



• The Research Institute Nature and Forest (INBO)



• The Departement de l'Etude du milieu naturel et agricole (DEMNA)



The initiatives mentioned above are also members of our Steering Committee, which is also composed of the following members. We would like to thank them all for the strategic guidance they provide us with:



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A report compiled and designed by Angelique Berhault, Communication Coordinator of the Belgian Biodiversity Platform

### MORE INFORMATION



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