First EU BON Stakeholder Round Table

EU BON - Integration of biodiversity data for Europe and requirements for Policy

Brussels, 18 June 2013

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www.eubon.eu

Some initial thoughts ... and aims for the workshop!

Main obstacle for reaching the 2020 biodiversity goals / implementing the European Biodiversity Strategy :

Knowledge gaps in biodiversity data / information :
→ lack of timely integration of (well informed) biodiversity aspects & issues into actual political, economic, and management decisions ….

Basic aims of the workshop:

- identify existing gaps of current biodiversity information
- determine current needs regarding biodiversity information by policy / stakeholders
- potential of EU BON to develop solutions to overcome existing knowledge gaps:

→ reliable, relevant, up-to-date, and publicly available biodiversity information - through the EU BON [GEO BON] data portal …

Agenda Stakeholder Round Table – Morning Session

11:00 **Welcome** *Christoph Häuser / Jane Shiel (EC)*

11:15 **General overview of EU BON and its targets** *Christoph Häuser*

11:30 **Synergies and contributions from other EU projects**
Chair: Dirk Schmeller (UFZ)

- *Kris Verheyen (University Gent; FunDivEurope)*
- *Jörg Freyhof (IGB; BioFresh)*
- *Lyubomir Penev (Pensoft; STEP)*
- *Rudolf May (German Federal Agency for Nature Conservation; INSIPRE)*
- Peter Galbusera *(KMDA; CONGRESS)*

BREAK

12:30 **Gap-analysis of existing biodiversity information with regard to the European Biodiversity Strategy and its indicators**
Chair: Dirk Schmeller (UFZ)

- *Urmas Kõljalg (UniversityTartu)*
- *Christina Secades (UNEP-WCMC)*

Discussion

13:30 **LUNCH**

Agenda Stakeholder Round Table – Afternoon Session

14:15 EU BON and global governance Chair: Rob Doubleday (Univ. Cambridge)

(1) Perspectives for biodiversity policy *Georgios Sarantakos (GEO), Anne Teller (EC)*

(2) Perspectives for citizen science *Veljo Runnel (University Tartu), Cigdem Adem (EEA)*

(3) EU BON Biodiversity Portal - content creation and integrating key datasets for policy, science and citizens *Patricia Mergen (RMCA)*

Discussion

15:30 Resume (Expectations for EU BON from European Policy Bodies) Chair: Christoph Häuser

16:00 End of event

Global challenges:

The **big** issues:

- **Biodiversity,**
- **Climate,**
- **Water & Food,**
- **Poverty.**

The ***Knowledge Society*** is based on science and technology, i.e., the availability of sound & reliable scientific data, analysis and tools
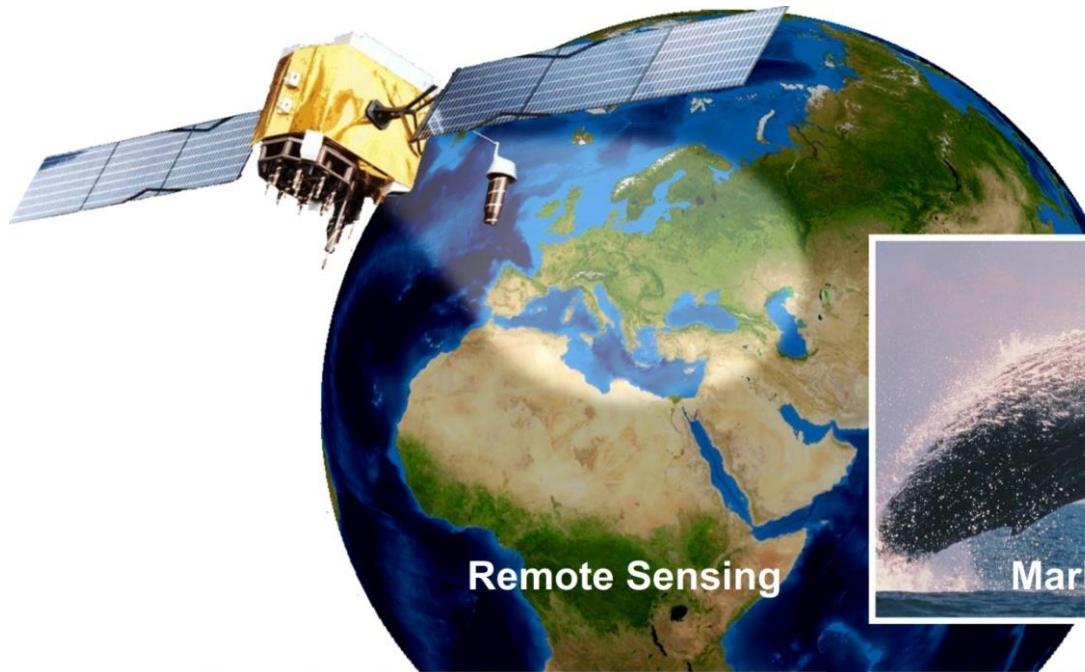
Biodiversity – challenges:

- ongoing biodiversity loss – continued / increased extinction rates / habitat losses

- missing baseline data – lack of basic knowlege

- fragmentation of available information – problems accessing/using existing knowledge

- targeted information delivery – limited impact of scientific data on policy and individual behaviour

The real threat: biodiversity loss

- **Mammals:**   [IUCN „red lists" - www.iucnredlist.org]
  - (1990): threatened + endangered: 647 spp.
  - (2008): threatened (CR, EN, VU):   1141 spp.
  - (2012): threatened (CR, EN, VU):   1139 spp.
  -     **(= 23% of all mammal species known)!**
- **Reptiles:**
  - (1990) : threatened (+ endangered): 207 spp.
  - (2003) : threatened: 293 spp.
  - (2008) : threatened: 423 spp.
  - (2012) : threatened: 807 spp.

- **Increases from: 2000 - 2003 - 2008**
  - plants: 5,611   :   6,774   :   8,457 spp.
  - vertebrates: 3,507   :   3,524   :   5,966 spp.
  - invertebrates: 1,928   :   1,959   :   2,496 spp.
- n.b.: **insects** (= 950,000 spp.): only 0.02% of all insect species could yet be evaluated!!

The challenge: diversity & fragmentation of bio*diversity* data

Remote Sensing

Marine
© Wanetta Ayers

Terrestrial

Freshwater

© Johannes Penner

© Johannes Penner

EU BON project – key information

EC *FP7 - Cooperation Theme 6: Environment (incl. climate change)* (*ENV.2012.6.2-2*): *Assessing global biological resources: the European contribution to GEO BON*

EC funding mechanism: Collaborative Project
Project start: 1st December, 2012
Duration: 54 months (48 + 6)
Consortium: 30 partners (18 countries)
Budget: 11,6 mio Euro, <9 mio Euro EC contribution

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EU BON consortium partners

Museum für Naturkunde, Berlin (MfN) – Germany

University of Tartu (UTARTU) – Estonia

University of Eastern Finland (UEF) – Finland

Global Biodiversity Information Facility Secretariat, Copenhagen (GBIF) – Denmark

University of Leeds (UnivLeeds) – UK

Helmholtz Centre for Environmental Research, Leipzig / Halle (UFZ) - Germany

The Spanish National Research Council: MNCN, Madrid (CSIC) – Spain

University of Cambridge (UCAM) – UK

Centre National de la Recherche Scientifique (CNRS: IMBE) – France

Pensoft Publishers, Sofia – Bulgaria

Senckenberg Research Institute and Natural History Museum, Frankfurt (SGN) - Germany

Vizzuality, Madrid – Spain

FishBase Information and Research Group (FIN), Los Banos – Philippines

Hellenic Centre for Marine Research, Iraklion (HCMR) – Greece

The Natural History Museum, London (NHML) – UK

Freie Universität Berlin (FUB: BGBM) – Germany

University of Copenhagen (UCPH) – Denmark

Royal Museum for Central Africa, Tervuren (MRAC) – Belgium

Plazi, Bern – Switzerland

GlueCAD Ltd. , Haifa – Israel

Institute for European Environmental Policy (IEEP) – UK

Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus – Brazil

Swedish Museum of Natural History (NRM), Stockholm – Sweden

Institute of Botany, Slovak Academy of Sciences (IBSAS), Bratislava - Slovak Republic

European Bird Census Council (EBCC) – Spain

Norwegian Biodiversity Information Centre (NBIC) – Norway

Edmund Mach Foundation (FEM)– Italy

TerraData environmetrics – Italy

European Academy of Bolzano (EURAC) – Italy

UNEP World Conservation Monitoring Centre (WCMC) , Cambridge – UK

EU BON work packages

WP1: Data sources: requirements, gap analysis & data mobilization *[University Tartu]*;

WP2: Data integration & **interoperability** *[Univ Eastern Finland - Digitarium]*;

WP3: Improving **tools** and methods for data analysis & interface *[Univ Leeds]*;

WP4: Link environment to biodiversity: **analyses** of patterns, processes & trends *[UFZ]*;

WP5: EU BON **testing** and validation of concepts, tools, and services *[CSIC]*;
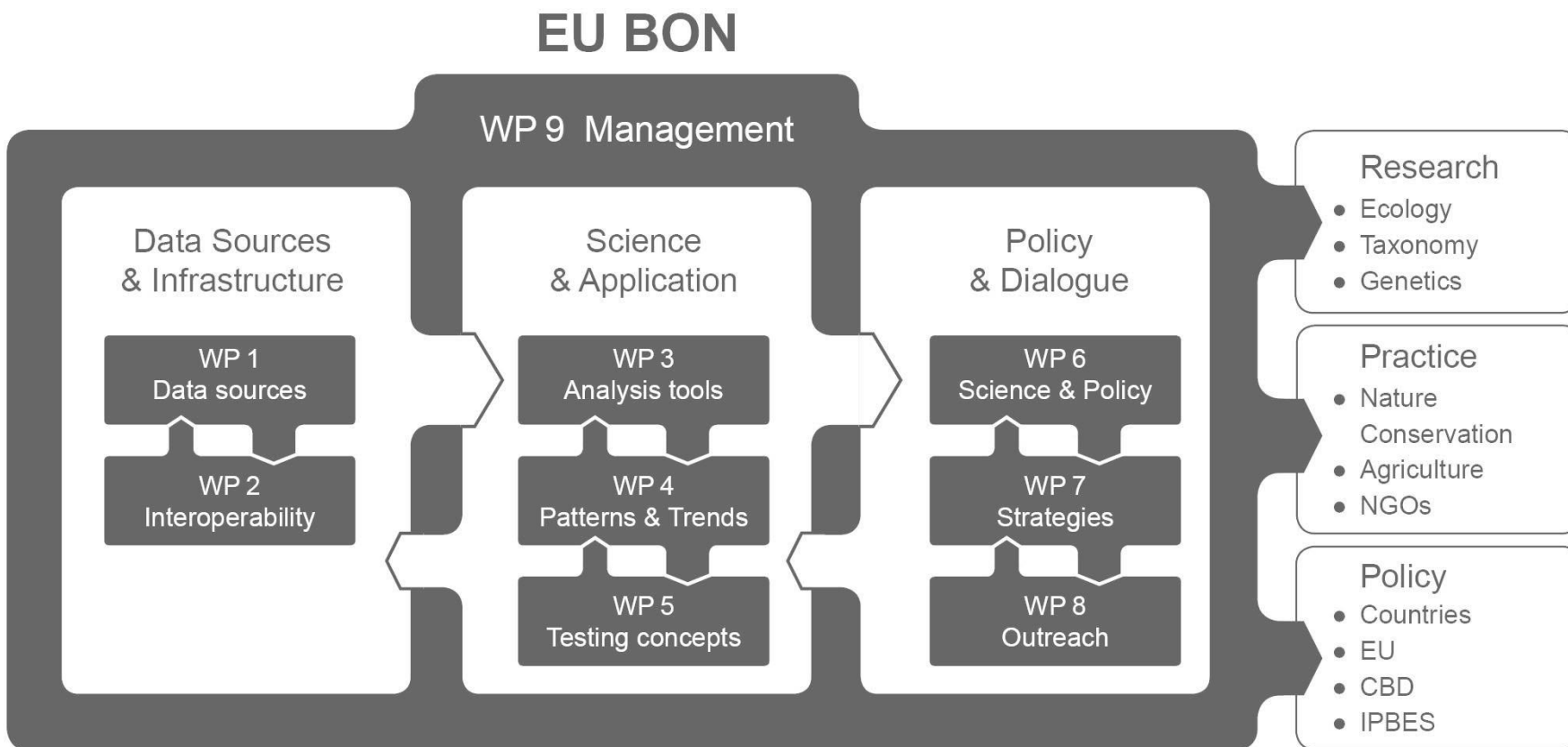
WP6: Stakeholder engagement & science-policy dialogue *[Univ Cambridge]*;

WP7: Implementation of GEO BON: **strategies** & solutions at European (& global) levels *[CNRS: IMEB]*;

WP8: Dissemination and outreach *[Pensoft]*;

WP9: Consortium **management** & organization *[MfN]*.

EU BON workflow / organization

EU BON

WP 9 Management

Data Sources & Infrastructure
- WP 1 Data sources
- WP 2 Interoperability

Science & Application
- WP 3 Analysis tools
- WP 4 Patterns & Trends
- WP 5 Testing concepts

Policy & Dialogue
- WP 6 Science & Policy
- WP 7 Strategies
- WP 8 Outreach

Research
- Ecology
- Taxonomy
- Genetics

Practice
- Nature Conservation
- Agriculture
- NGOs

Policy
- Countries
- EU
- CBD
- IPBES

EU BON characteristics

A key feature of EU BON will be the delivery of integrated, near-real-time relevant data – both from on-ground observation and remote sensing – to the various stakeholders and end users ranging from local to global levels.

This will require:

(1) the establishment and adoption of **new data standards and integration techniques**,

(2) **harmonized data collection** and management,

(3) the development of **new approaches** and strategies for **future biodiversity monitoring and assessment**,

(4) providing **practical indicators** and **interpretation tools** for end-users - from, e.g., agriculture to nature conservation.

Main *objective* of EU BON
=> building a *European* contribution to *GEO BON*

The main objective of EU BON is to build a substantial part of the Group on Earth Observation's Biodiversity Observation Network (**GEO BON**),
also in light of the new Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (**IPBES**).

Expected **EU BON** contributions to **GEO WP** / tasks:

IN-01 Earth Observing Systems (C1)
IN-02 Earth Data Sets
IN-03 GEOSS Common Infrastructure

ID-01 Advancing GEOSS Data Sharing Principles
ID-02 Developing Institutional and Individual Capacity (C1, C2)
ID-03 Science and Technology in GEOSS

SB-01 Oceans and Society: Blue Planet (C1, C2)
EC-01 Global Ecosystem Monitoring
BI-01 Global Biodiversity Observation (GEO BON)

EU BON outputs and products (1)

- **gap analysis** for available data layers at different scales, mainly in/for Europe (WP1)

- **strategies** for targeted **data mobilization** (WP1)

- new and improved **data standards** for advancing **interoperability** (WP2)

- new, scalable/customized **European Biodiversity Portal** (WP2 / WP8)

- **software tools** for improved recording / mapping of **habitats, species distributions** and **patterns** (WP3)

- Improved **models** for impacts of different drivers on abundance & distribution, applicable at different scales (WP4)

- **guidelines** for improved, integrated **monitoring schemes** at different scales / levels (WP4)

EU BON outputs and products (2)

- results & lessons from **operating EU BON** test **sites:** template and recommendations for **global network** of **GEO BON sites** (WP5)

- recommendations for future integrated **national / regional biodiversity information infrastructures** (BIFS / BONS), including business plan (all, WP7)

- blueprint for a **global biodiversity monitoring scheme / infrastructure** (all, WP7)

- contribute to **IPBES** (information) needs at European and national levels (WP6 / WP7)

Symposium and EU BON kickoff meeting
Berlin, 11-15 February 2013

Symposium : "Nature and Governance: Biodiversity Data, Science, and the Policy Interface"

Topics (16 invited speakers, >120 participants)

- Which data does policy need?

- The future of biodiversity information: new ways for generating, managing, and integrating biodiversity data

- How new approaches can link scales and disciplines

- Broadening the base: new ways to engage the public and stakeholders in biodiversity monitoring and assessments

First WP5 Meeting at the EU BON test site Doñana
2-4 April 2013, Doñana Biological Station

Goal:
- Sharing data resolution and format among testing sites
- Build a draft on principles and guidelines for establishing and operating EU BON test sites

Participants:
- 23 people from 10 institutions (6 countries) met in the field station of the CSIC, Doñana Biological Station, Andalucia, Spain

EU BON Task Groups are getting established

Informatics and Data Standards Task Force (ITF)

1st Meeting: *29-31 May 2013*, Trondheim (Norway)

Coordination by WP2 (Data Integration & Interoperability; Lead: Hannu Saarenmaa)

➢ Getting to know GEOSS and GEO BON

➢ Detailed discussion and group work on the EU BON WP2 tasks

- Architectural design – how to integrate with GCI, LifeWatch, and other networks
- EU BON portal
- Review and guidelines for using data standards
- Data sharing tools – how to cover more data types and implement wider standards
- Gap analysis and priorities for filling identified gaps in data coverage and quality – WP1
- Registry and metadata catalogue
- Helpdesk and training programme

Policy/Stakeholder Round Table

1st EU BON Stakeholder Round Table: *18 June 2013*, Brussels (Belgium)

Coordinated by WP6 (Stakeholder Engagement & Science-policy Dialogue; Lead: Rob Doubleday)

➢ Expectations from the EC & political stakeholders

➢ Gap-analysis with regard to the European Biodiversity Strategy and its indicators

➢ The contribution of EU BON to support the EC with regard to IPBES

➢ Perspectives for citizen science

EU BON – Science-Policy and Stakeholders WP 6

Objectives:

- review **policy requirements for biodiversity data** at European and national levels

- **engagement with relevant political authorities** and other stakeholders at European and national levels in support of the delivery of the EU BON project

- identify and pilot **new approaches to overcome barriers** to the effective use of biodiversity data in conservation policy at European and national levels

- to build up **stakeholder dialogue** with exemplar sector-specific user communities (including business)

- to test and refine **interactive visualization** and **decision support tools**

Tasks – Science-Policy and Stakeholders WP 6

- Review policy and stakeholder requirements for biodiversity data

- EU BON stakeholder round table

- In-depth analysis of biodiversity data use in conservation policy

- Sector specific stakeholder engagement with user communities

- Testing and refining interactive visualization and decision support tools

WP 6 Partners:

Thank you very much for your attention!

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