



The BION Biodiversity Network – linking stakeholder from local, national, and international organizations

Dr. Jens Mutke
Nees-Institute for Biodiversity of Plants, Univ. Bonn &
BION – The Biodiversity Network

ALCUE NET meeting on Biodiversity and Climate Change, Marseille November 2014



BION – Biodiversity Network Bonn
www.bion-bonn.org

Funded by the Federal Agency for Nature
Conservation (BfN) with funds from the Federal
Ministry for the Environment, Nature Conservation,
Building and Nuclear Safety (BMUB)





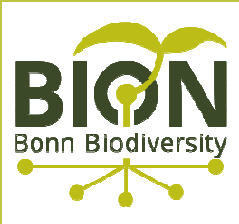
Biodiversity related networks and organizations in Germany

- c. 500 institutions doing Biodiversity related research in Germany
- More than 100 Botanic Gardens and c. 60 Natural History Museums (important „shop windows“ to promote biodiversity issues)

Mainly Research-related networks/organization:

- DIVERSITAS Deutschland e.V.
- The German Network-Forum for Biodiversity Research
- iDiv: German Centre for Integrative Biodiversity Research
- German Committee Future Earth (D-FutureEarth)
- Ecological Society of Germany, Austria & Switzerland (*GfÖ*) & Society for Tropical Ecology (*gtö*)





Bonn as former Capital has a unique setting with several Federal Ministries & Agencies, Research Institutions – and as Germany's United Nations City



19 UN organisations with 950 employees

focus on environment and development
(e.g., UNFCCC, UNCCD, UNEP/CMS)

& other international organizations like
IPBES, Global Crop Diversity Trust,
IUCN Environmental Law Centre



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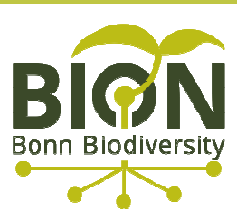




What is BION?

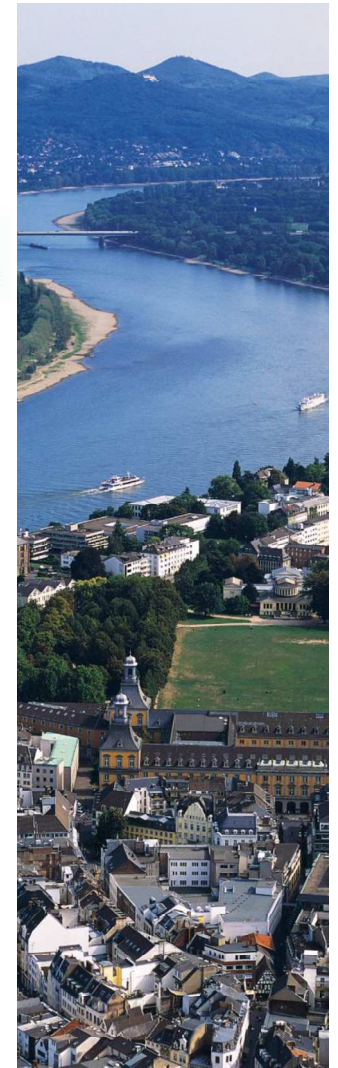
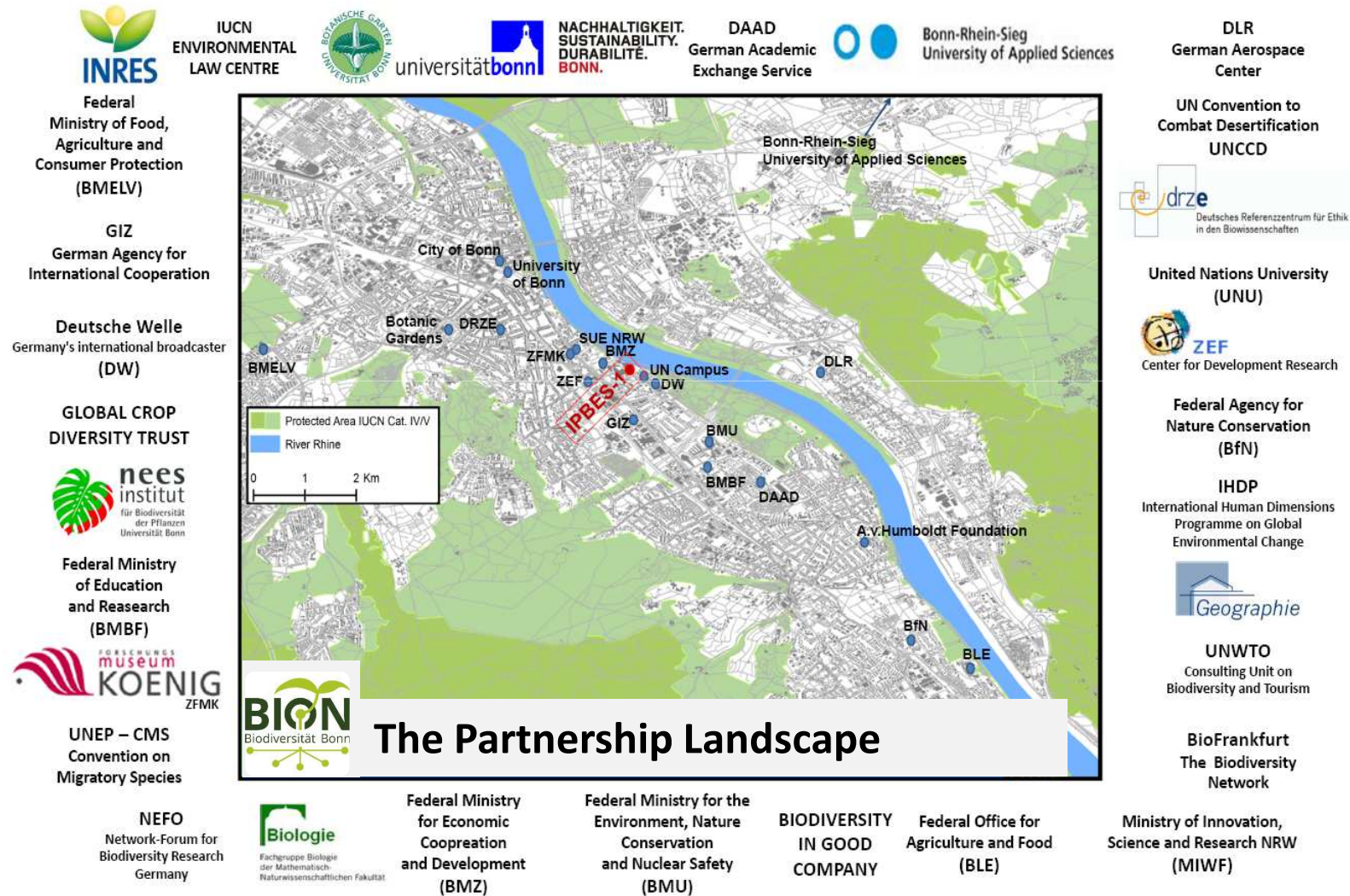
- Network of wide range of stakeholders in the field of biodiversity (*55 organizations in Bonn and surroundings: UN organizations, Federal and State Ministries and Agencies, Universities & Research Institutions, NGOs, Media, City of Bonn...*)
- Until recently, there was very few interaction between these organisations
- BION: Showcase improvement of interactions between society, science and politics (*science-policy interface*)
- Funded since 2013 by the German Federal Agency for Nature Conservation / the Ministry for the Environment
- Coordinated at the Botanic Gardens of Bonn University (Prof. Maximilian Weigend and 2 staff members)





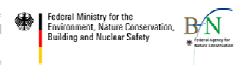
The Partnership Landscape

c. 55 partner-institutions in the Bonn region



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Network Activities & Focal Areas

Regular Network Activities

- Coordinating activities by the secretariat
- Multistakeholder Meetings with thematic section
- Option (and funding) to organize individual smaller discussion boards, workshops, outreach activities etc.
- Electronic Bulletin & Newsletter
- outreach activities: e.g. public lectures, guided tours, exhibitions

In order to structure the initial work and to prepare for the 1st BION congress **9 working groups** were constituted.





1st International BION conference “Biodiversity Today for Tomorrow” 17 – 19 September 2014, Bonn / Germany

Over 300 participants from academia and practice
from 38 countries & 112 institutions

Thematic Sessions on:

- Extinctions and the biodiversity crisis
- Global biodiversity patterns
- Technologies for monitoring
- Biodiversity for food and agriculture/Bio-economy
- Biodiversity and human development
- Ethical aspects of biodiversity Societal (social, cultural, political) impact
- Capacity building to sustain biodiversity: approaches, needs and reflections on BION’s role & contribution
- Biodiversity and Quality of Life: Interdisciplinary Challenges



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Reflecting Biodiversity.

Holistic approaches and regional adaptation

International DAAD Alumni Seminar,
 12 – 15 September 2014

- 25 participants from 23 countries
- Ecological, political, cultural, and economic aspects and challenges of biodiversity
- Focus on international programmes and conventions, political/economic implementations
- Visiting e.g., IPBES, Global Crop Diversity Trust, IUCN Environmental Law Centre





BION - main goals / deliverables

- Pooling of scientific expertise and resources, Roster of experts
- Information-platform
- Specific collaborations and joint projects

The 1st BION Conference was an important ,marketplace‘ to match potential partners and identify common interests

Next steps

Make a concrete and visible impact across thematic & geographical scales to motivate the network partners to further participate and to develop BION on a sustainable basis.....

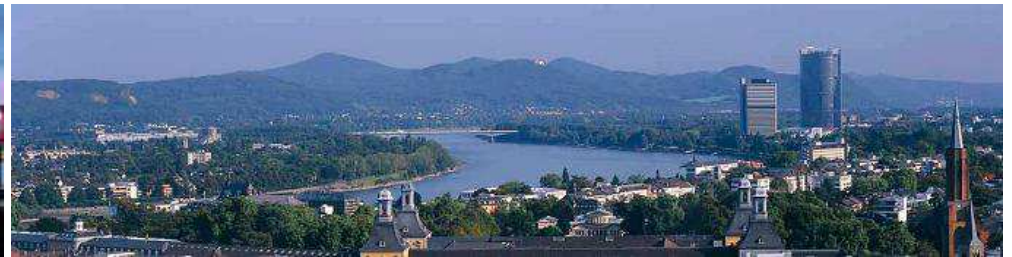


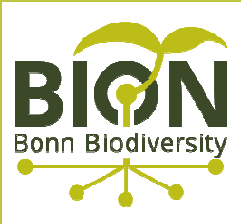


The BION stakeholders

User-specific needs and motivation of different groups of stakeholders

- Universities & Research Institutions
- Federal and State Ministries and Agencies
- UN organizations
- Media
- (Local) NGO
- City of Bonn
- The public





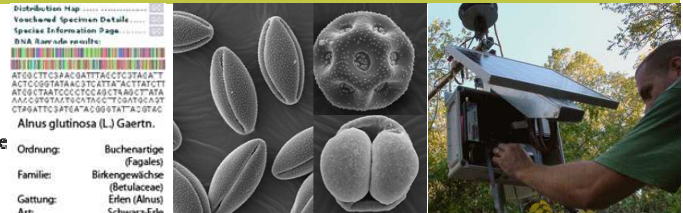
Examples of Project Initiatives

bringing together several BION partners



Wilderness Area Siebengebirge

- Raise awareness & facilitate informed discussion with the public
- Contribute to biodiversity monitoring



Multi-Sensor Biodiversity Monitoring Station

Develop and establish system for automated record of local biodiversity data (bioacoustics, DNA barcodes, video/photo traps)



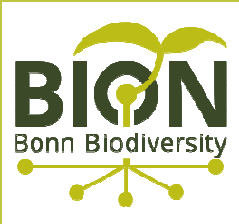
An Integrated Biodiversity Conservatory at the Melb Valley in Bonn

on-farm conservation of genetic resources (i.e. local fruit tree varieties & bees), biodiversity research, public and formal education



Multifunctional Landscapes

Develop and disseminate cultivation methods that increase biodiversity and resilience agricultural areas



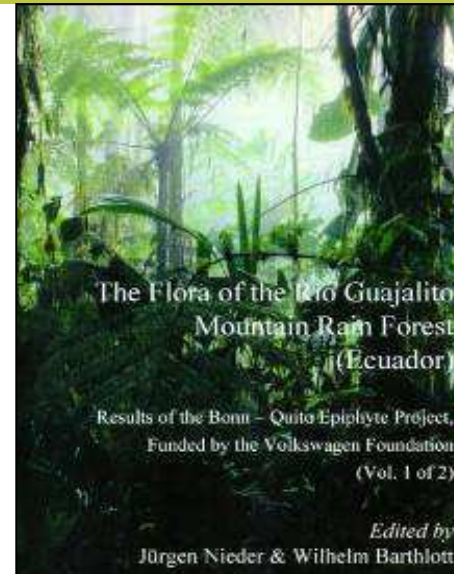
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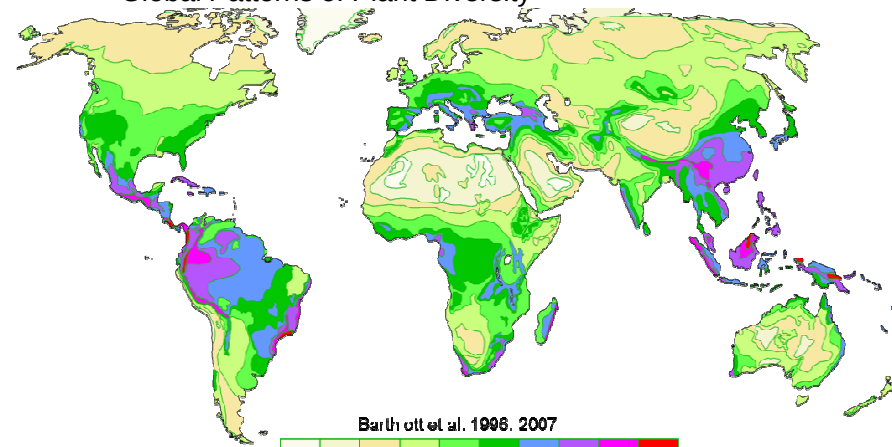
Long history of large research projects referring to non-European and especially Latin American biological and cultural diversity

BIOTA AFRICA

BIOdiversity Monitoring TTransect Analysis in Africa



Global Patterns of Plant Diversity

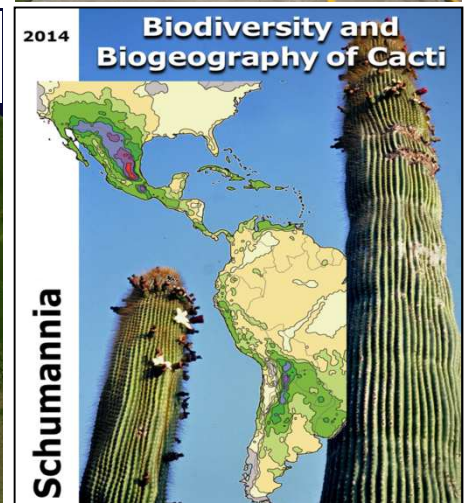
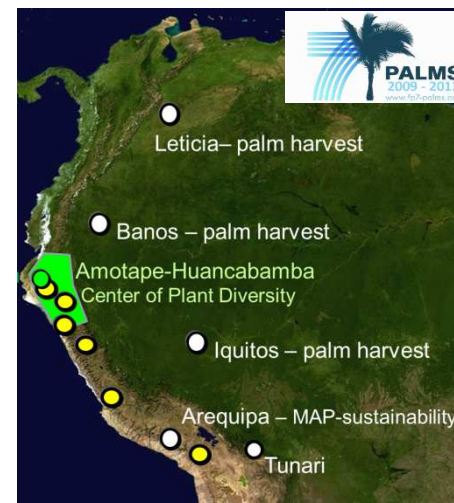
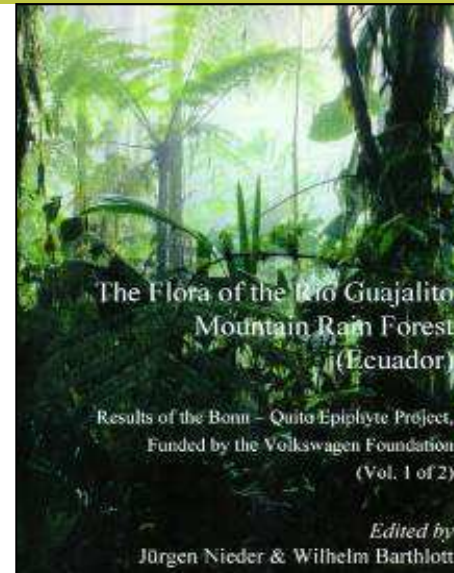


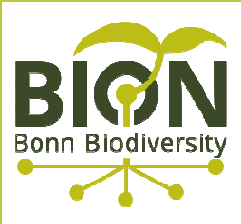


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Large research projects
referring to non-European
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Examples of Project Initiatives

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Biodiversity & Cultural Heritage in the Cañaris District (NW Peru)

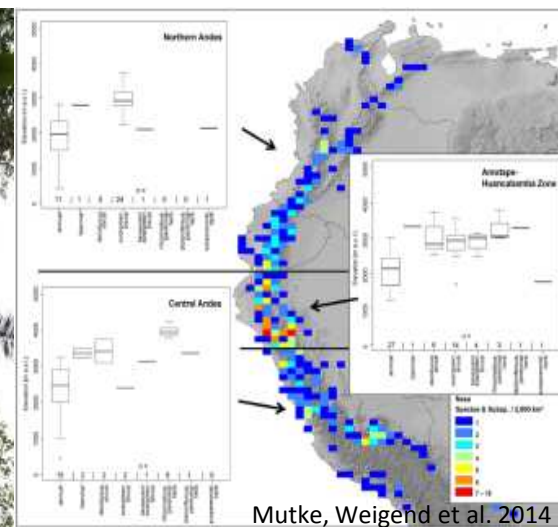
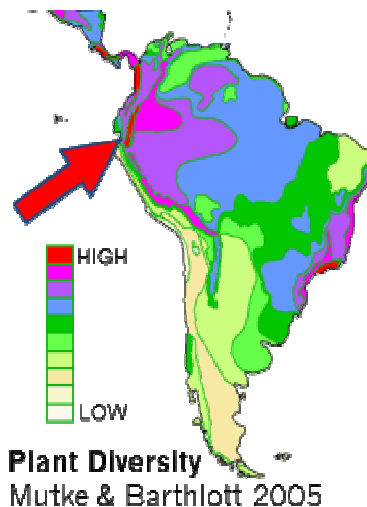
Initiating a collaborative, international, and transdisciplinary stock-taking project
Bridging the gap between natural and social sciences, biodiversity and local communities

BION Partners involved:

Interdisciplinary Latin America Center at Bonn University (ILZ)

Nees-Institute & Bonn Botanic Gardens

University of Cologne





Public relations & outreach

Öffentliche Abendvorträge
 Dienstag, 16. September 2014
 Hörsaal I, Universität Bonn, Am Hof 1
 Der Eintritt ist frei.

18:00 Uhr
„Biodiversität – Dimension, Bedeutung und Bedrohung der Vielfalt des Lebens“
 Prof. Dr. Wilhelm Barthlott,
 Nees-Institut für Biodiversität der Pflanzen

19:00 Uhr
„Vielfalt erfreut – Moderne Biodiversitätsforschung“
 Prof. Dr. Maximilian Weigend,
 Nees-Institut für Biodiversität der Pflanzen

Öffentliche Abendvorträge sind Teil der Internationalen Bion-Konferenz „Biodiversity today for tomorrow“ vom 12.-14. Sept. 2014



UN-Tag der Artenvielfalt: Schatzkammer Botanische Gärten Bonn

Markt der Möglichkeiten in den Botanischen Gärten der Universität Bonn.
 Einrichtungen und Organisationen aus und um Bonn präsentieren Vielfalt und Mehr -
Biodiversität zum Anfassen.

Sonntag, 25. Mai 2014 10 - 18 Uhr



BION - BIODIVERSITÄTSNETZWERK BONN

WILLKOMMEN BEI BION

BIODIVERSITÄT
 In und um Bonn findet sich eine einzigartige Konzentration von lokalen, regionalen, nationalen und internationalen Akteuren im Bereich der Erforschung und Erhaltung von Biodiversität. Die Partner-Institutionen zeichnen sich durch ihre Einzigartigkeit, Spezialisierung und

INFORMATIONSAUSTAUSCH
 BION bietet auch die Service-Funktion im Sinne einer Informations-Drehscheibe u. a. als Wissenschafts-Politik-Schnittstelle, zur Vermittlung von Experten etc. In dieser Funktion soll auch die Einbindung der BION-Partner in internationale Prozesse wie IPBES oder auch nationale Netzwerke

ORGANISATION
 Mitglieder in BION sind mehrere so unterschiedliche Einrichtungen wie internationale Organisationen (z. B. UNU, UNCCD), etwa 15 relevante Universitätsinstitute und -einrichtungen, mehrere Bundesministerien (z. B. BMUB, BMZ, BfN) und nachgeordnete

NETZWERK
 BION hat das Ziel, Synergien zwischen diesen Institutionen, Einrichtungen und ihren eigenen Netzwerken zu fördern. Durch den Prozess einer multidisziplinären, dynamischen und gesteuerten Vernetzung ("Networking") beschließt BION auch mit Fragen zur





Public relations

universität bonn BION – Biodiversitätsnetzwerk Bonn

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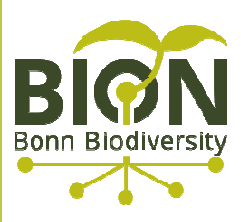


The example of Botanic Gardens –

Science, Conservation, Public relations

- > 3,000 Botanic Gardens around the world cultivate > 100,000 species (1/3 of global plant diversity)
- 106 Botanic Gardens in Germany: >> 50,000 species
- Bonn Botanic Gardens: > 11,500 Species, >150,000 visitors / year
- Provide materials for research and teaching to the university's faculties of Science and of Agriculture
- Cooperation with local and international conservation institutions and NGOs, Ex-situ collections
- Education Programme ('Grüne Schule'): guided tours, public lectures, excursions & cooperation with local schools





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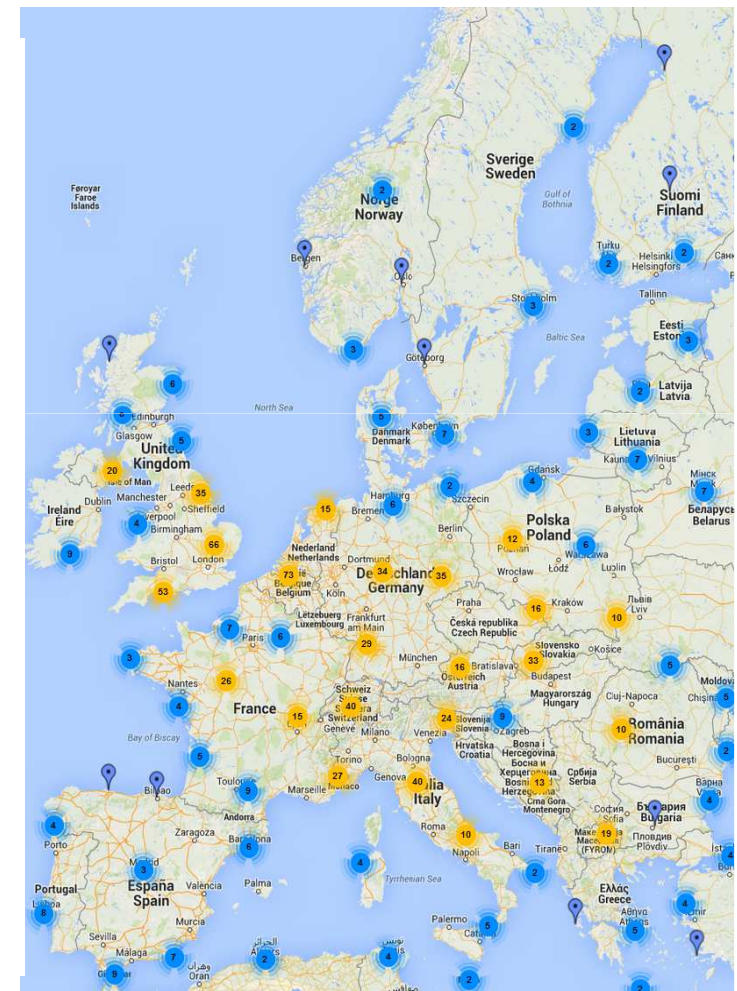
Botanic Gardens – Scientific Collections, Experts, But also important ,shop windows‘ to connect people with nature

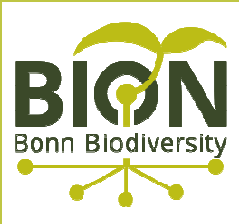


The work of botanic gardens depends on gaining access to and exchanging new plant material

Need a climate of confidence between the countries owning the genetic resources and the botanic gardens

Need to show that new material is acquired legally & benefits are shared





Botanic Gardens – Scientific Collections, Experts, But also important ‚shop windows‘ to connect people with nature

- Close cooperations within the international Botanic Garden Community (e.g. via BGCI, the International Plant Exchange Network (IPEN), or the ‘International foundation for gardener exchange’)
- Large programmes for research, conservation and, capacity building are linked to botanic gardens, e.g., elaboration of standard floras and online databases, conservation assessments, restoration projects, ex-situ conservation etc.

Examples of BION Project Initiatives related to Botanic Gardens



The Nagoya Protocol on Access & Benefit Sharing in Germany

many user groups (incl. researchers) yet don't have enough expertise and capacity to comply



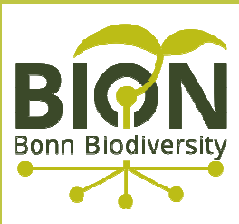
Initiate awareness raising and capacity building



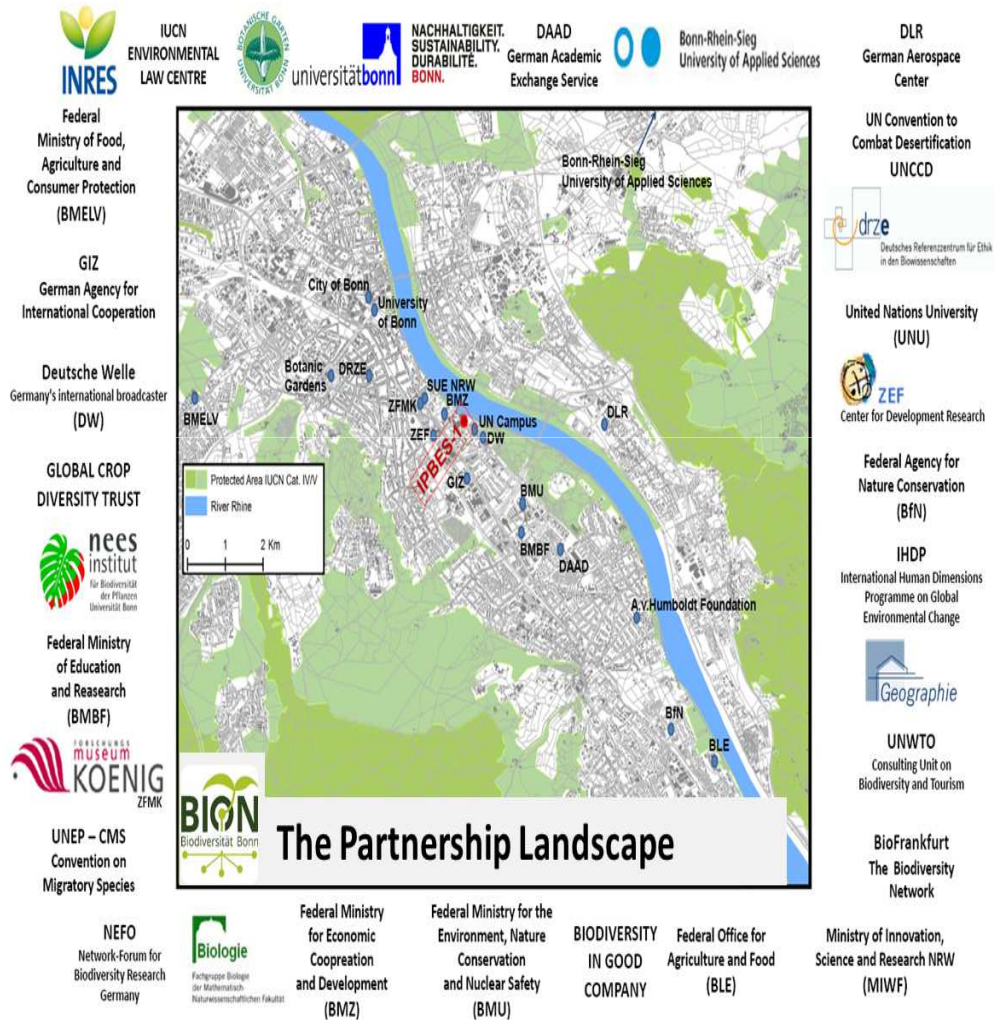
Capacitating for ex-situ conservation

Establish a joint practical formation of “conservation horticulturalists”

Targeted specifically at applicants from South America and Africa



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Lessons learned until now

- Wide range of stakeholders really motivated to engage in the network
- Complex topics like environmental change need interdisciplinary and transdisciplinary networks
- Build on existing initiatives and experiences
- Involve your (potential) stakeholder right from the start
- Care for visibility and transparency right from the start
- Networks need continuity (starting new networks every three years due to funding periods highly ineffective)
- Effective Networks need people who are able to focus on network activities & to build personal networks and experiences over a longer period of time
- Citizen science – the involvement of volunteers in science
- Include education and training initiatives
- ...be relevant for the stakeholders!