



DIVERSITAS' contribution to international scientific and policy initiatives

EPBRS meeting

7-9 November 2007, Porto





DIVERSITAS is an international programme dedicated to biodiversity science, under the auspices of:



Integrate biodiversity science, linking biological, ecological, and social disciplines



DIVERSITAS' missions

- ◆ Improving knowledge on biodiversity science
- ◆ Organising the production & delivery of scientific expertise to policy makers





DIVERSITAS Science Plan



bioGENESIS

Biodiversity changes

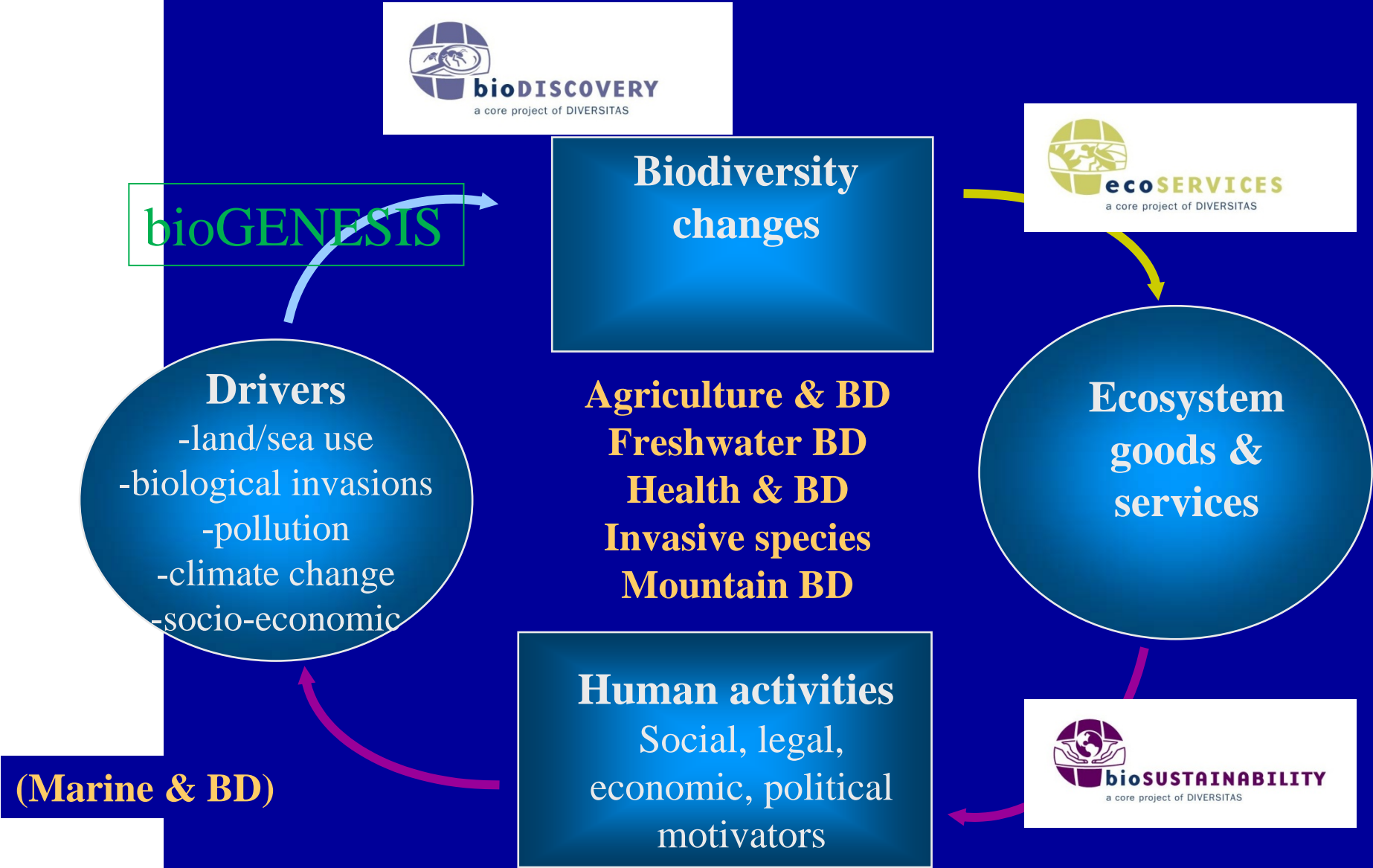
Ecosystem goods & services

Drivers
-land/sea use
-biological invasions
-pollution
-climate change
-socio-economic

Agriculture & BD
Freshwater BD
Health & BD
Invasive species
Mountain BD

Human activities
Social, legal,
economic, political
motivators

(Marine & BD)





Science – policy dialogue

- ◆ **Convention on Biological Diversity** (Memorandum of Understanding, 1997): requests for scientific expertise (e.g. The Global Taxonomy Initiative; Invasive Alien Species; mountain biodiversity; valuation of biodiversity)



- ◆ Toward an International Mechanism of Scientific Expertise on Biodiversity (**IMoSEB**)
- ◆ Collaboration with **EPBRS**





Outline

- ◆ DIVERSITAS science: involvement in GEOSS
- ◆ DIVERSITAS science – policy dialogue: involvement in IMoSEB



GEO & GEOSS

- ◆ GEO is an inter-governmental group
 - 66 nations
 - European Commission
 - 46 participating organisations
- ◆ Goal: to establish a global, coordinated, comprehensive and sustained system of Earth observation systems: **the Global Earth Observing System Systems (GEOSS)**



GEOSS Societal Benefit Areas

- ◆ Natural Hazards & Disasters
- ◆ Human Health
- ◆ Energy Resource Management
- ◆ Weather
- ◆ Water
- ◆ Climate
- ◆ Ecosystems
- ◆ Agriculture
- ◆ **Biodiversity**

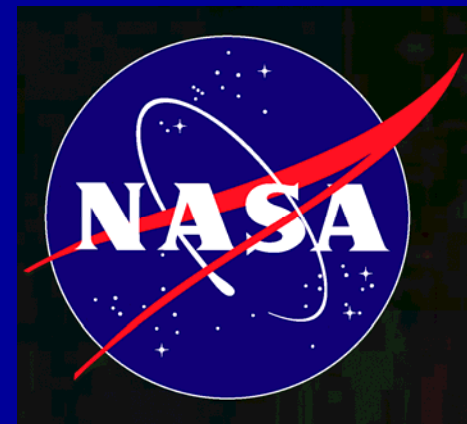


R&C Buchanan



Biodiversity Societal Benefit Area

- ◆ DIVERSITAS and NASA are leading the task to develop a Global Biodiversity Observation System that can
 - detect
 - assess, and
 - analyse changes at all levels and dimensions of biodiversity





First steps



bioDISCOVERY
a core project of DIVERSITAS

- ◆ Initial workshop on «User needs, methodologies & strategies for a global observation system for biodiversity» (Geneva, Oct 06)
- ◆ GEO Biodiversity Community of Practice:
 - SC-bioDISCOVERY (Chairs: N Jürgens (Germany), P Leadley (France), N Ash (UNEP-WCMC))
 - Additional partners (e.g. GBIF, GTOS)
- ◆ Preparation of a vision paper



Vision: an integrated, operational biodiversity observing system

- ◆ Integrate:
 - Existing terrestrial, freshwater, & marine observation systems
 - Data from different provider communities
 - Modelling into monitoring schemes
- ◆ Global coverage & global issues (climate, diseases outbreaks)
- ◆ Multi-scale approach (global, regional, local)
- ◆ Long-term funded (ie operational)
- ◆ Respond to multi users needs
- ◆ Common measures & observations focusing on site-specificities



Next steps

- ◆ GEO IV (Cape Town, S-Africa; Nov 07)
- ◆ Wide consultation
- ◆ Planned meeting to finalise the vision and draw the implementation phases

www.bioobservation.net



Biostrat - GEOSS

- ◆ Involve the Biostrat community within the GEOSS process
 - Input on the vision paper
- ◆ Participate in the implementation of a Global Biodiversity Observing System
 - Work on the implementation at the European and national scale
- ◆ EPBRS meeting in France (2008)

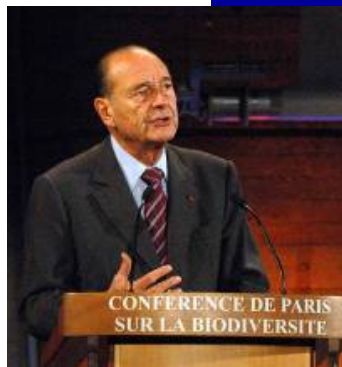


Outline

- ◆ DIVERSITAS science: involvement in GEOSS
- ◆ DIVERSITAS science – policy dialogue: involvement in IMoSEB



Toward an International Mechanism of Scientific Expertise on Biodiversity



- ◆ Paris declaration on biodiversity (Jan 05)
- ◆ Call by the French President for a new international mechanism for biodiversity “similar to IPCC”, for climate (Jan 05)
- ◆ Launch of a consultation on a new International Mechanism of Scientific Expertise on Biodiversity (Feb 06, Paris; funded by France)



Consultation

- ◆ Led by an International Steering Committee & an Executive Committee involving scientists and policy makers
- ◆ Co-chairs: Michel Loreau and Alfred Oteng-Yeboah
- ◆ Executive secretariat based in France (IFB)
- ◆ Website with an open electronic forum

<http://www.imoseb.net/>



First phase of the consultation

- ◆ **Assessing the need and scope** of an IMoSEB
 - Is there a need for such a mechanism?
 - What would its added value be compared with existing mechanisms?
 - Who would its audience & stakeholders be?
 - What would its mandate & governance structure be?
- ◆ **A limited set of case studies**
 - Mapping out the decision-making landscape affecting biodiversity
 - Case studies on the mobilisation & use of scientific expertise (the case of Mexico, avian flu, incorporating indigenous & traditional knowledge)
 - Analysing existing models for delivering scientific expertise (Lessons from previous & current assessments; management of invasive species; fisheries; use of the MEA for decision-making)



Phase 1 to Phase 2: Options

1. A partnership of existing mechanisms delivering science to national and international decision-making bodies
2. A new mechanism, modelled loosely on the IPCC, but with both inter-governmental and non-governmental components
3. Invite IPCC to consider developing a biodiversity aspect to their activity
4. Strengthen existing networks of scientists to feed science, standards & principles into various fora through a small coordination mechanism



Phase 2 of the consultative process

Regional consultations

- ◆ North America (Montréal, Jan 07)
- ◆ Africa (Yaoundé, Feb 07)
- ◆ S-Africa (Cape Town, March 07)
- ◆ Europe (Geneva, May 07)
- ◆ Asia (Beijing, Sept 07)
- ◆ S-America (Bariloche (Argentina), Sept 07;
Brazil, Nov 07)
- ◆ Oceania (Papouasia New Guinea, Oct 07)



Next steps

- ◆ Synthesis of the received contributions and consultations
- ◆ International Steering Committee meeting (Montpellier, France; Nov 2007): **final recommendations**
- ◆ Presentation at the CBD-COP9 (Bonn Germany; May 08)



DIVERSITAS contribution: to bring the scientific community into the process

- ◆ Scientific organising committee of the Paris Conference (Jan 05)
- ◆ DIVERSITAS First Open Science Conference; (Nov 05): **DIVERSITAS Oaxaca declaration** supporting the call for a new mechanism of scientific expertise for biodiversity
- ◆ Loreau *et al*, Nature commentary, July 06
- ◆ Participation in the organisation of the regional consultations: North America (Jan 07), Africa (Feb 07), S-Africa (March 07), Europe (May 07), Asia (Sept 07) S-America (Argentina – Sept 07, Brazil – Nov 07)





First DIVERSITAS Open Science Conference 9-12 November 2005 Oaxaca, Mexico

- ◆ Over 600 participants from 60 countries
- ◆ 110 press releases worldwide
- ◆ Oaxaca declaration (IMoSEB)

Second DIVERSITAS OSC 13-16 October 2009 Cape Town, S-Africa

- ◆ 600 participants
- ◆ Call for symposium: fall
- ◆ Focus on science – policy interface





DIVERSITAS

an international programme
of biodiversity science

www.diversitas-international.org