



Eeva Furman, ALTER-Net chair, SYKE
Maurice Hoffman, conference chair, INBO

Science underpinning the EU 2020 Biodiversity Strategy

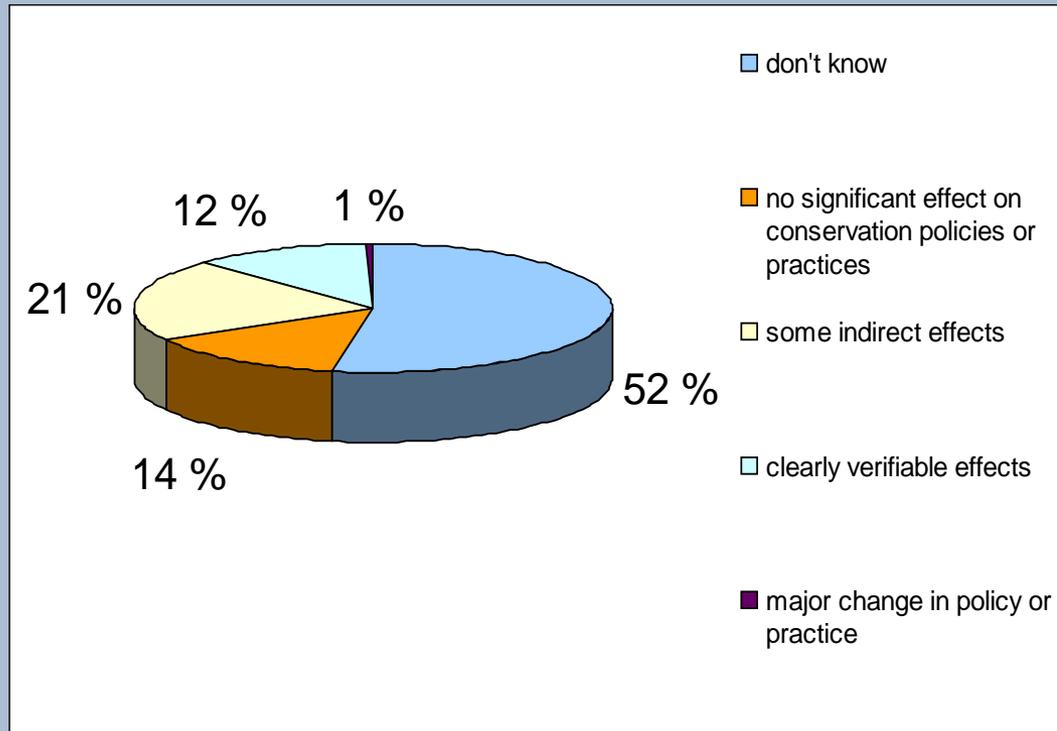
**Summarized recommendations from ALTER-Net,
EC DG Environment conference, Ghent, 15-18.4.2013**

- » Europe´s Biodiversity Research Network
- » 26 European organisations from 18 countries
- » Main activities:
 - » Interdisciplinary research
 - » Developing research infrastructures
 - » Training
 - » **Science-policy** and other outreach activities



EPBRS Helsinki 2006:

How research suggested in the Malahide recommendations has impacted conservation policies or practices?



Research organisations and universities:

- » 14% not at all
- » 52% don't know

What research is needed:

- » more of the same

Science underpinning the EU 2020 Biodiversity Strategy



- » **Conference organised by
ALTER-Net and EC DG
Environment in Ghent April
15-18, 2013**



Aim of the conference



- » To contribute to the implementation of the Strategy
 - » Elucidate what science can already offer to the implementation
 - » Activate researchers to produce more knowledge and tools for the implementation
 - » Raise awareness among European research community on the Strategy and its implementation challenges



For each target

The process

ALTER-Net



Identification of moderator pairs: researcher + EC policy maker

Development of provocative 3-5 statements

Inviting comments on the statements via website

Presentations and group discussions at the conference

Recommendations 8-22

Recommendation headline

Communication of the recommendations

Target 1: Conserving and restoring nature: Provocative statements

- » Present day Natura 2000 network not coherent but a patchwork
- » Natura 2000 implementation requires coherent scientific knowledge
- » Protecting nature for its intrinsic value is not delivering -> adapt market economy and develop Natural Capital
- » Societal engagement -> long-term conservation success



Target 1: Conserving and restoring nature: Recommendations

ALTER-Net



Adaptation and rapid evolution are underestimated

Same methodology of for using genetic criteria to all member states

Ecosystem health

Achieve compatibility and comparability of habitat status

Remote sensing

Methods for quantifying values of natural capital



Target 1: Conserving and restoring nature: Recommendation headline

Natura2000 success depends on

- » *ecosystem health,*
- » *genetic health and*
- » *is important for human well-being*



Target 2: Maintaining and enhancing ecosystems and their services: Statements



Ecosystem services emphasis is

- » **A utilitarian approach**
- » **Promotes ecosystem services with monetary value**
- » **Leads to merchandizing biodiversity**



Target 2: Maintaining and enhancing ecosystems and their services: Recommendations



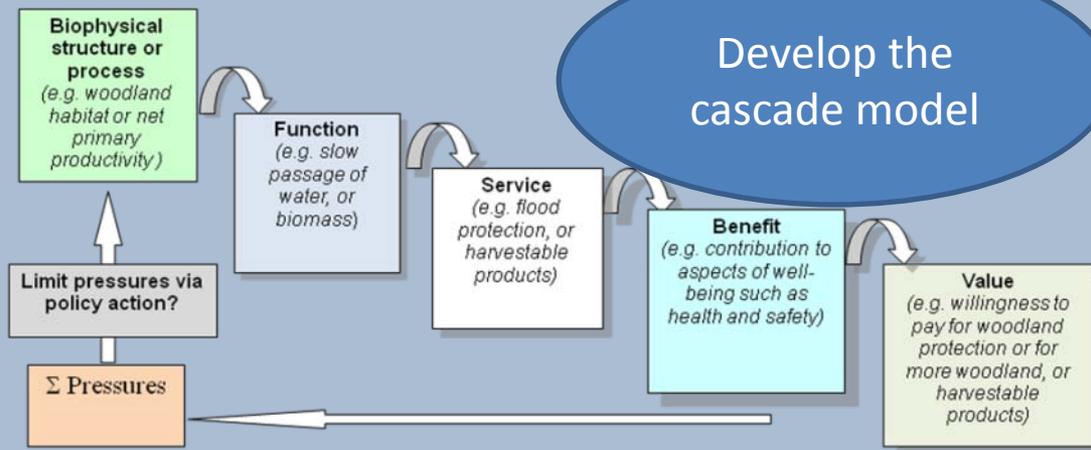
Improve methods, don't kill the concept

Develop transparent valuation procedure

Compensation schemes

Go beyond monetary valuation

Develop the cascade model





Target 2: Maintaining and enhancing ecosystems and their services: Recommendation headline



Mapping ecosystems and valuing their services is important

The use of monetary valuation and economic instruments to be limited to areas and situations where useful

Target 3: Ensuring the sustainability of agriculture and forestry: Discussion items

ALTER-Net



- » Biodiversity protection incentives for managed farmland
- » Engaging actors
- » Sustainability criteria for landscapes
- » Natura 2000 sites and resource use goals





Target 3: Ensuring the sustainability of agriculture and forestry: Recommendations



Landscape design

Policy design and incentives

Benefits and risks of intensification

Multiple functions and policy evaluation outcomes into knowledge base and use

Influence consumption patterns with policy

Target 3: Ensuring the sustainability of agriculture and forestry: Recommendation headline

ALTER-Net



- » It is vital to know which problems need standard approaches and which need targeted policy instruments
- » In addition to engaging sector actors, use standard best practices or innovative and diversified solutions
- » These should be monitored; evaluation-research needed

Target 4: Ensuring the sustainability of fisheries: Statements

- » Best way to reach healthy fish stocks?
- » Rights-based catch shares -> incentive for sustainable harvest
- » Bottom trawling and the seafloor disturbance – harmful or not?
- » Fisheries: out-dated way of food production
- » Age structure, space and genetic diversity into catch strategies



Target 4: Ensuring the sustainability of fisheries: Recommendations



Functional communication strategy on scientific progress

Overexploitation

Shared management responsibilities – concern and involvement

Assess real impact of aquaculture on ecosystems

Evaluate effects of different scenarios linked with right based catch shares

Target 4: Ensuring the sustainability of fisheries: Recommendation headline



- » **Generate adaptive management tools**
- » **Use ecosystem based fisheries management**

Target 5. Address the problem of invasive alien species: Discussion items



- » Making the best prioritisation
- » How to balance with other stakes (climate change, economy)?
- » Future challenges
- » Surveillance and information sharing



Target 5. Address the problem of invasive alien species: Recommendations

ALTER-Net



Natural
movement/artificial
introduction

Focus on proved risk, use
precautionary principle

Research on
changes from low to
high risk species

Understanding
genetic pollution

Research on the process
and impacts of public
involvement



Target 5: Address the problem of invasive alien species: Recommendation headline



- » **Policy to aim at the broad impact of invasive alien species**
- » **Development of legal and economic instruments**
- » **Use of science to integrate and link datasources to fill in the legal instruments**

Target 6: Global biodiversity crisis: Statements



- » **European production and consumption patterns -> impact on global biodiversity: aim at 0 net footprint outside EU**
- » **Conservation of biodiversity and ecosystem services -> link and contribution to combat global socio-ecological challenges**
- » **EU Outermost Regions and Overseas Countries and Territories -> hotspots that need attention**



Target 6 Global biodiversity crisis: Recommendations

ALTER-Net



Material and
energy tax

Research on
tipping points

EU wide
restoration
programme

EU overseas
biodiversity
+++

Biodiversity
footprint calculator
and label

Dialogue between
public sector,
companies and civil
society

Target 6: Global biodiversity crisis: Recommendation headline



Price of food, fibre and water to encompass both the production and maintenance cost of the ecosystem.

Next steps



- » **Communicate recommendations to:**
 - » DGs (research, environment, agriculture, transport, energy)
 - » CBD
 - » EP
 - » National bodies
 - » Research community (book?)
- » **Use in planning and communicating future research**

Thank you!

ALTER-Net



www.alter-net.info

2013 03 25