Restoration in the context of the EU Biodiversity Strategy

Presentation to CBD workshop on ecosystem restoration and conservation, Vilm June 2014.

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The EU Biodiversity strategy

- Commission Communication of May 2011-Our Life Insurance, our natural capital: an EU biodiversity strategy to 2020.

- Headline target to 2020- Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020 and restoring them in so far as feasible----.

- 6 operational targets and 20 associated actions.

- Council conclusions and EP Resolution.

- http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0244

Target 2 of the EU biodiversity Strategy

By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems

Actions related to Target 2

- **#5 Improve knowledge of ecosystems and their services-MAES-2014**
- **#6a- Framework for setting p-riorities for Restoration- 2014**
- **#6b- Green Infrastructure Strategy-by 2012**
- **#7a- Biodiversity Proofing -2014**
- **# 7b-No Net Loss of biodiversity and ecosystem services-initiative by 2015.**

Action 6a of the EU Biodiversity Strategy

By 2014, Member States, with the assistance of the Commission, will develop a strategic framework to set priorities for ecosystem restoration at sub-national, national and EU level.

Process

- **Working group of Member States' experts and stakeholders (October 2012 to October 2013)**

- **Workshop –May 2013**

- **Support contract led by ARCADIS**

- **Outputs on DG ENV webpage.**

- **Status**

Terminology and Objectives - 1

- **Meanings of degraded and restored.**

- **What is the extent of degraded ecosystems in the EU?**

- **Are restoration objectives the same for all ecosystems?**

Terminology and Objectives-2

- Can anywhere in the EU be described as being in a "natural state"?

- Natural/semi-natural areas cover only 1-2% of the land surface.

- What ecosystem types do we have in the EU- (Urban, Cropland, Grassland, Woodland and Forest, Heathland and Shrub, Sparsely Vegetated Land, Freshwater, Marine- MAES Classification.)

Terminology and Objectives- 3

- **If virtually all of EU territory is "degraded" then are we intending to restore 15% of the entire territory of the EU by 2020?**

- **What are our restoration objectives.?**

- **Are restoration objectives always the same? –what about the influence of land-use, history, location etc?**
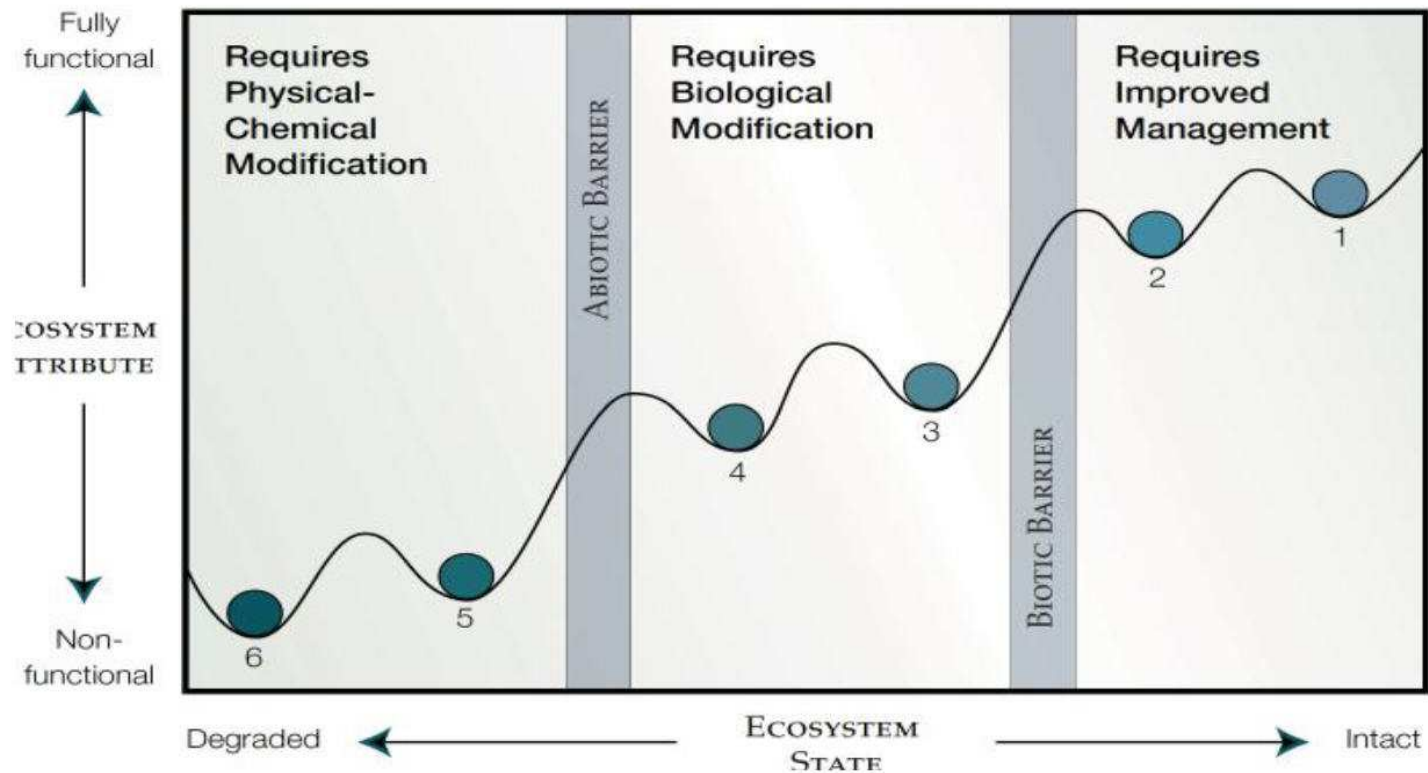
Restoration is a process and not necessarily a final destination.

- **For any ecosystem type, several states or ecological conditions can be described along a continuum from poor to excellent. Any significant improvement that moves an area to a better state/condition should be regarded as a contribution to the 15% restoration target.**

'Restoration'

- Process of restoration needs to be defined in a better way (see conceptual model Hobbs & Harris for understanding ecosystem states and transitions) → work with **restoration levels!**

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ILLUSTRATIVE EXAMPLE FOR A MEMBER STATE WITH HIGH COVERAGE OF NATURAL AREAS

		Types of areas	Base-line (2010)	By 2020 (and net gain)	By 2050
LEVEL 1	Satisfactory abiotic conditions. Key species, properties and processes of ecosystems and their functions are restored	a.o. 'wilderness' areas and N2000 habitats and species in FCS	30%	32% (**+ 2%** from L2)	40% (**+ 8**% from L2)
LEVEL 2	Satisfactory abiotic conditions, but disrupted ecological processes and functions. Declining diversity and key species.	a.o. N2000 habitats and species not in FCS, …	15%	28% (**+ 15%** from L3; - 2% to L1)	35% (**+15**% from L3; 8% to L1
LEVEL 3	Highly modified abiotic conditions, reduced ecological processes and functions, dominated by artificial habitats but retains some native species and stable populations.	a.o. non-protected rural areas, not including intensive agriculture	30%	16% (**+ 1%** from L4; - 15% to L2)	10% (**+ 9**% from L4; 15% to L3
LEVEL 4	Highly modified abiotic conditions, severely reduced ecological processes and functions, dominated by artificial habitats with few and/or declining populations of native species; traces of original ecosystem hardly visible.	'transformed ecosystems' (e.g. Intensive agriculture, build urban areas, roads, airports, quarries, brownfield areas, heavily modified water bodies); heavily degraded 'natural' and 'semi-natural' ecosystems	25%	24%	15%
TOTAL SURFACE			100%		
TOTAL 'RESTORABLE' SURFACE			70%		
TOTAL 'RESTORED' SURFACE (cumulative starting from baseline)				18%	50%

DEGRADATION

RESSTORATION

ARCADIS

What information do we have to support this approach?

- **What are useful descriptors of ecosystem condition?**

- **Appropriate descriptors will be dependent on the ecosystem type.**

- **What information do we have?**

- **What are we doing to improve the information/knowledge base?**

- **The MAES initiative**

The Nature of the 15% Target

- **Q-15% of what-is everything to be included in the calculation?**
- **A-All EU territory is included within the scope of the 15% restoration target. Based on the principle that no location should be regarded as non-restorable- ecological conditions and functions can always be improved.**

The Nature of the 15 % Target-2

- **Q-Land vs Sea?**
- **A-15% for the Land and 15% for the Sea.**
- **Q-Across the EU or Member State by Member State?**
- **A-15% restoration within the territory of each MS. No burden sharing.**

Links to other policies and actions.

- **Nature conservation-birds/habitats directives (Natura 2000)**

- **Freshwater and Marine (Water Framework Directive and Marine Strategy Framework Directive)**

- **Air Pollution.**

- **Eutrophication and Soil Protection.**

The Baseline

- **To measure an improvement you need a reference point.**

- **Previous experience.**

- **The 2010 EU biodiversity baseline (EEA Report) has been identified as the reference point.**

Challenges 1

- **EU 2020. Growth and jobs.**

- **Restoration as a generator of growth and jobs.**

- **Restoration as a contribution to climate change adaptation and protection against natural disasters.**

Challenges 2

- **Financing restoration**
- **EU funding mechanisms**
- **National plans and for restoration**
- **Restoration as part of the Operational Programmes under Cohesion Policy.**
- **Restoration as part of the Rural Development Programmes under CAP.**

Challenges 3

- **Links to other policies.**
- **Reducing pressures-contribution to 15%**
- **Increasing awareness**
- **Knowledge and funding constraints**
- **The capacity of the restoration sector**

The next steps

- **Guidance to Member States**
- **Restoration to be included in PAs RDPs and OPs.**
- **In 2014 Member States develop their prioritization frameworks at national and sub-national level.**

Restoration support contract

http://ec.europa.eu/environment/nature/biodiversity/comm2006/pdf/2020/RPF.pdf

Costs of achieving target 2 of the Biodiversity Strategy

http://ec.europa.eu/environment/nature/biodiversity/comm2006/pdf/2020/Fin%20Target%202.pdf

Mapping and Assessment of Ecosystems and Services.

http://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/index_en.htm

Green Infrastructure

http://ec.europa.eu/environment/nature/ecosystems/index_en.htm

Thank you for your attention.

The End

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