



BioScore

Biodiversity Impacts Assessment Using Species Sensitivity Scores

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ECNC–European Centre for Nature Conservation

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What is ECNC?

- European Biodiversity Expertise Centre for sustainable development
- European foundation
- Established in 1993
- Science-policy-society interface
- ECNC actively promotes, by bridging the gap between science and policy, the conservation of nature and especially of biodiversity in Europe; ECNC seeks the integration of nature conservation considerations into other policies and sectors.



ECNC thematic programmes

- Society and nature
- European ecological network
- State of Europe's nature and biodiversity
- Support to international organizations and policy initiatives
- Business and biodiversity

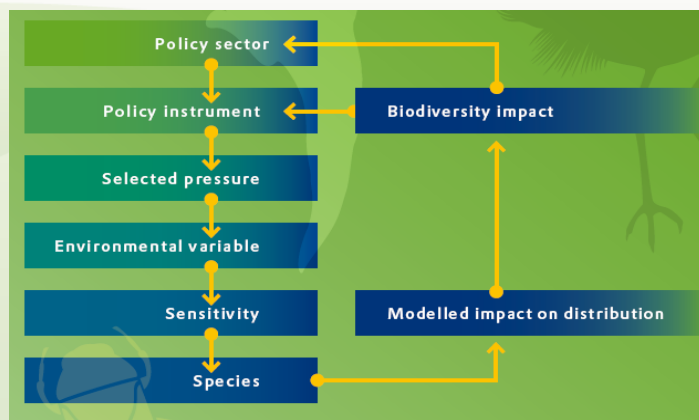


BioScore

- Feb 2006 – Jan 2009
- to develop a tool that is able to assess and monitor the possible impacts of Community policies on biodiversity in a cost-effective way.
- Database that contains information of the ecological preferences of the species to pressures (environmental variables)



Conceptual framework



Sectors and policy instruments

- 26 policy instruments:

Agriculture
Water
Energy
Transport
Nature and Environment
Fisheries
Development
Forestry

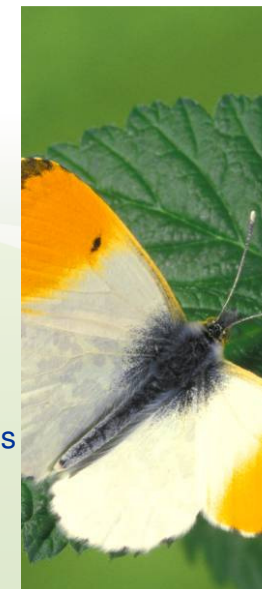
- EC Biodiversity COM
- 6th Environment Action Programme & Thematic Strategies
- Birds & Habitats Directive
- Climate change Communication & Kyoto Protocol
- European Spatial Development Perspective
- EC Biodiversity Strategy
- Sustainable Development Strategy
- Nitrates Directive
- Water Framework Directive
- Forest Focus

Main pressures

Eutrophication
Excessive use of fertilizers
Acidification
Water pollution
Air pollution
Deforestation
Afforestation
Land use change
Desertification
Overgrazing
Land abandonment
Urban sprawl
Global warming
Habitat fragmentation

Species considered

- Vascular plants: 700 species
- Butterflies: 77 species
- Birds: 154 breeding bird species
- Mammals: 50 species
- Amphibians and reptiles: 50 species
- Benthic macro-invertebrates: 40 families
- Freshwater fish: 108 species

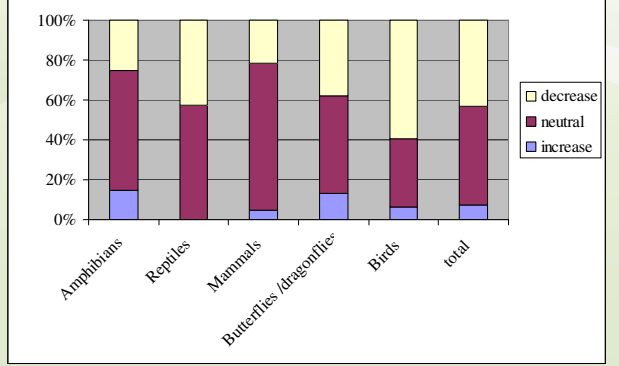


Application of the BioScore database

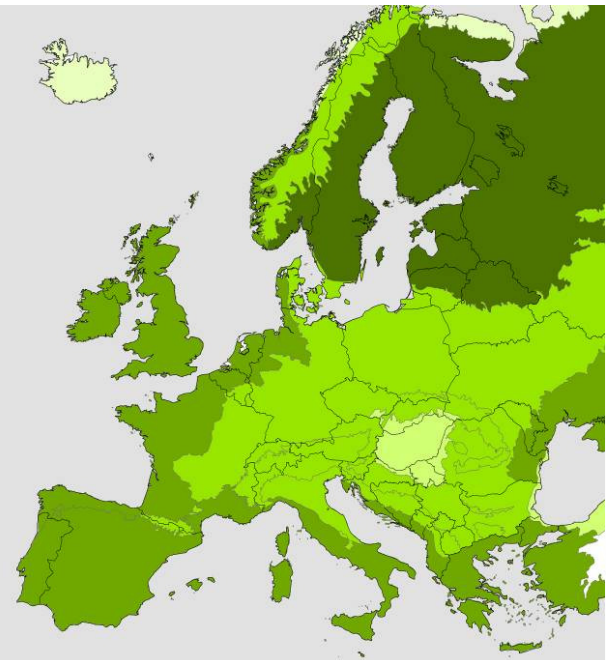
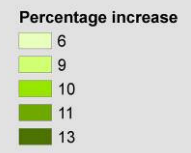
- Relative number of species that will benefit from an increase or decrease of a certain pressure (environmental variable)
- Locate the areas where the species will increase/decrease at biogeographical/national level



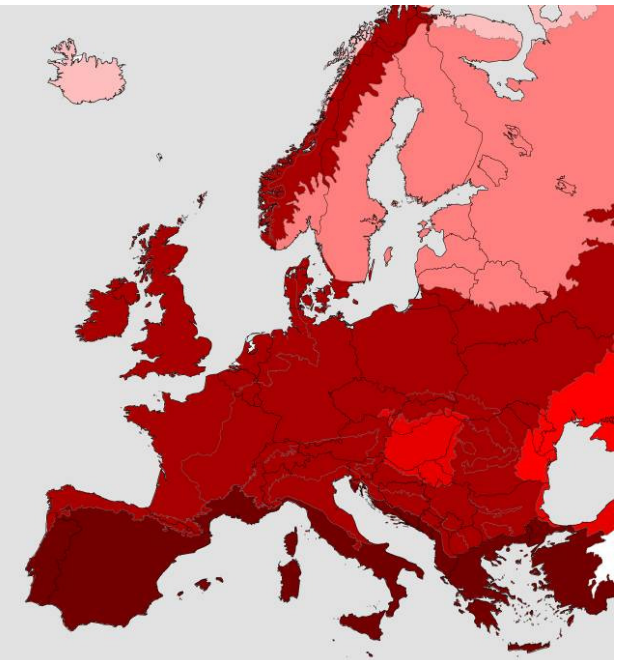
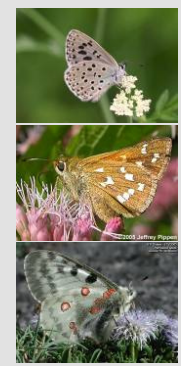
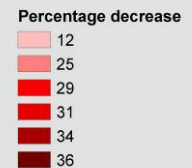
effects of bioenergy crops



Butterflies and biofuels

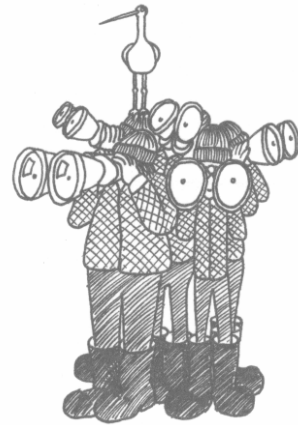


Butterflies and biofuels



Data used in BioScore

- existing data
- atlas
- monitoring programmes at local, national and international level
- collected by volunteers



Lawrence Jones-Walters



The team to Score



- **ECNC**-European Centre for Nature Conservation (**Coordination**)
- Netherlands Environmental Assessment Agency (MNP)
- Research Institute for Nature and Forest/Butterfly Conservation Europe (INBO/BCEurope), Belgium
- Wetlands International
- Alterra–Green World Research, the Netherlands
- Norwegian Institute for Nature Research (NINA)
- University of Rome, Dept. Animal and Human Biology, Italy
- European Forest Institute (EFI)
- Greek Biotope/Wetland Centre (EKBY)

- Steering group of policymakers and other stakeholders



Who pays?

- BioScore is a Specific targeted research project under the EC's Sixth Framework Programme, Priority 8.1.B.1: Sustainable management of Europe's natural resources. Contract 022661
- Budget: € 1,576,153
- Co-funded by most project partners



More information ...

www.ecnc.org/Bioscore/

