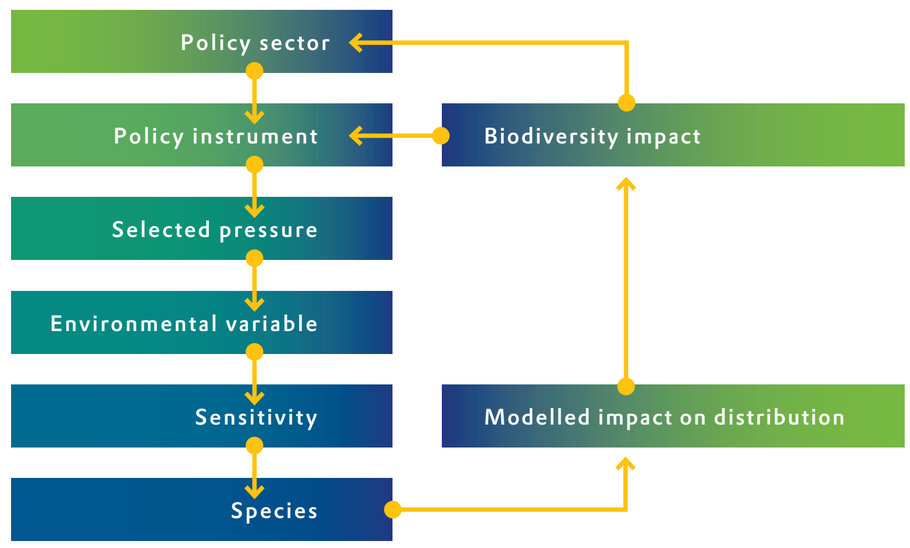
BioScore assesses impacts on biodiversity

What has BioScore achieved?

→ The BioScore project has developed a cost-effective tool that allows informed users to assess the impacts of key drivers and pressures influenced by Community policies on biodiversity (species) with the ultimate aim of helping to halt the loss of biodiversity in the EU by 2010 and beyond.

How has BioScore achieved this aim?

→ BioScore follows a unidirectional approach to relate individual policy measures to species distribution through their sensitivity to related pressures. A feedback loop ensures that the outcome helps decision making.



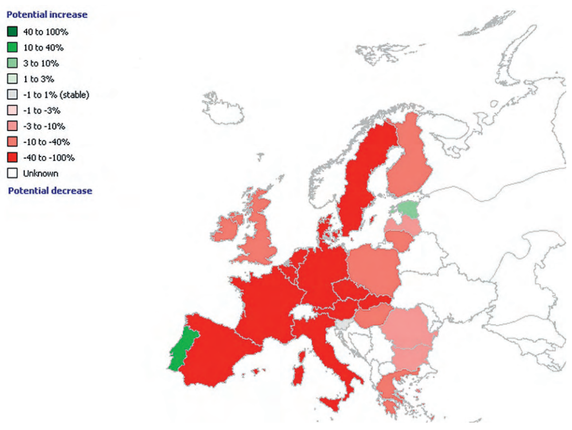
→ To quantify the possible impact of policy-induced pressures on biodiversity, we have identified measurable environmental variables and related these to preferences of individual species. Such explicit links between environmental variables and pressures provide the tool to relate sensitivity of a species (group) to a pressure and policy instrument.

→ BioScore assesses effects on butterflies and dragonflies, freshwater fish, aquatic macroinvertebrates, birds, vascular plants, mammals, amphibians and reptiles. In total over 1,000 species have been considered and integrated in the BioScore database, covering a wide variety of organism groups that together represent European biodiversity in general.

→ The BioScore project identifies species groups likely to benefit or suffer from a certain policy measure. The results from BioScore are spatially explicit data, indicating the areas where these species might occur in Europe at biogeographical, national and regional levels.

Case studies

Three case studies were performed within the framework of the BioScore project to test the usefulness and predictive power of the tool. Two of these were retrospective and their results were compared with historical data of biodiversity change related to a change in environmental parameters influenced by an EU policy: 'afforestation' and 'air and water quality'. The third case study considered a topical subject whose possible impacts on biodiversity at present fuels some heated debates: the production of biofuel to combat climate change.



Map from the predefined study on the impact of bioenergy plantations on biodiversity in Europe (Eggers et al., 2009) as included in the BioScore tool. Land use scenarios calculated in the context of the EURuralis project for different biofuel policy options (abolishing and doubling the current 5,75% blending target) were combined with species distribution maps as well as habitat suitability information from the BioScore database, resulting in potential habitat sizes per species. Comparing the biofuel policy options, habitat size changes were calculated and expressed as the share of species with an increase or decrease in potential habitat size. The map shows the aggregated values per country for a doubling of the current target by growing first generation biofuels.

ECNC
european centre for nature conservation

Discover what BioScore can do for you and download the tool from

www.bioscore.eu

or contact the Project Coordinator, Ben Delbaere (delbaere@ecnc.org)

Partners • **ECNC** - European Centre for Nature Conservation (Coordination) • **PBL** - Netherlands Environmental Assessment Agency • **INBO/BC Europe** - Research Institute for Nature and Forest/ Butterfly Conservation Europe, Belgium • **WI** - Wetlands International • **Alterra** - Green World Research, the Netherlands • **NINA** - Norwegian Institute for Nature Research • **Sapienza Università di Roma** - Department of Animal and Human Biology, Italy • **EFI** - European Forest Institute • **EKBY** - Greek Biotope/Wetland Centre

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