

OBServ

Open Library of Pollinator Biodiversity and Ecosystem Services Scenarios



bc³
BASQUE CENTRE
FOR CLIMATE CHANGE
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Services Modeling**





- Pollination is a critical ecosystem service and relies upon multiple species of pollinators, mainly insects
- The total economic value of crop pollination worldwide is estimated to be over **€153 billion annually**
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and the Convention on Biological Diversity (CBD) have called for a better assessment of pollination services that is directly relevant for policy making
- At the CBD CoP 13, thirteen countries signed the Coalition of the Willing on Pollinators committing themselves to take action to conserve pollinators and similar initiatives have been launched in the US (e.g. Presidential memorandum on pollinator health).



Day: December 12, 2016

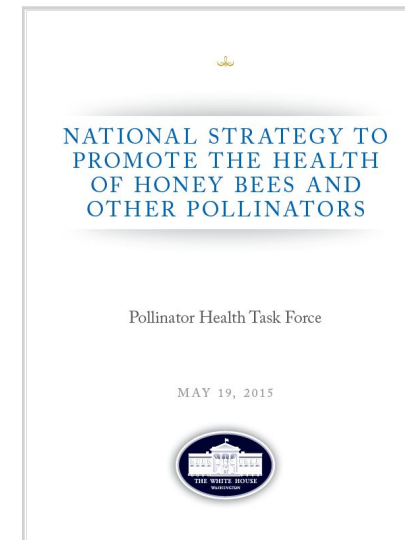
Signing of the Declaration on the Coalition of the Willing on Pollinators

THE LATEST NEWS

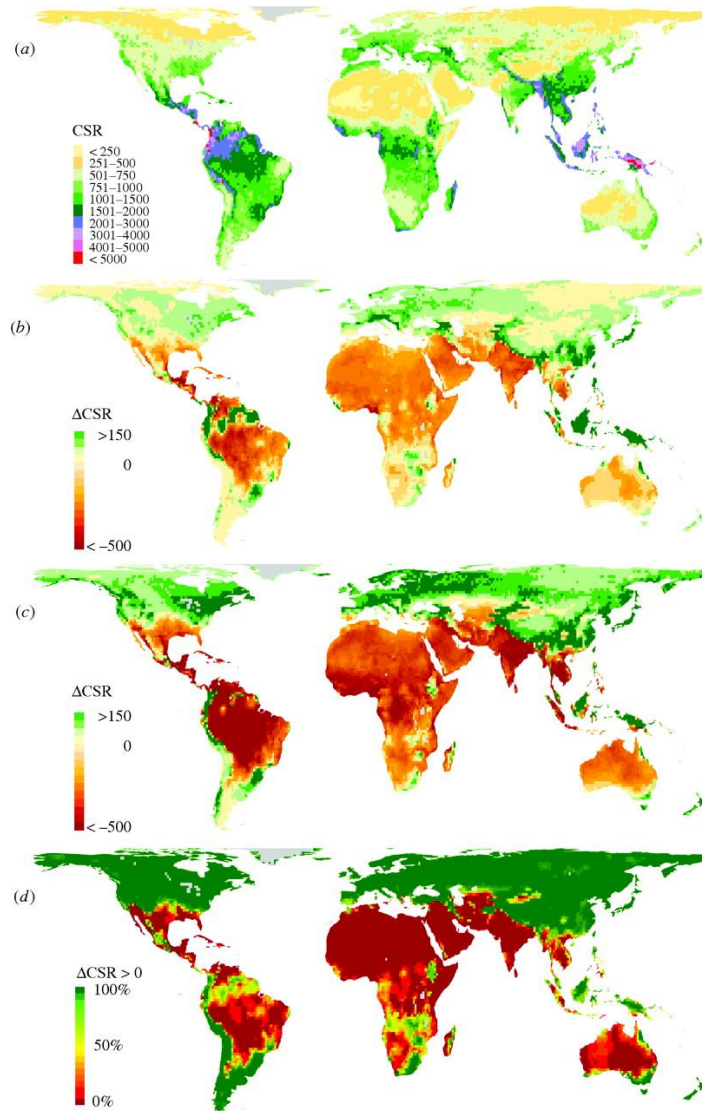
- NL Pollinator Strategy in practice
September 24, 2018
- EU steps up actions to stop the decline of pollinators
September 24, 2018
- BESNet Dialogue on pollination
September 23, 2018



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- This proposal aims to use pollinators and the ecosystem services they provide as a key model system to develop a predictive framework that can inform policy makers.



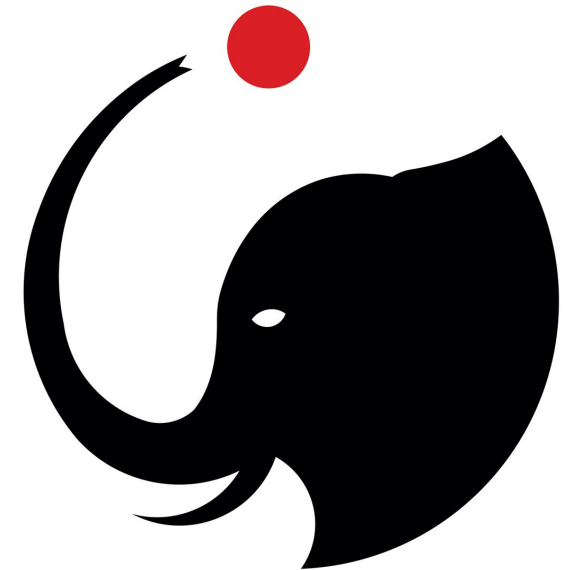
- Scenarios projecting changes in biodiversity are commonly used to identify species, services and areas at risk from global environmental change.
- The wide range of methodologies available makes it difficult for end users, such as conservation practitioners or policy-makers, to decide which method to use as a basis for decision-making.
- In addition, predictive models are often academic exercises disconnected from the needs of the end users.

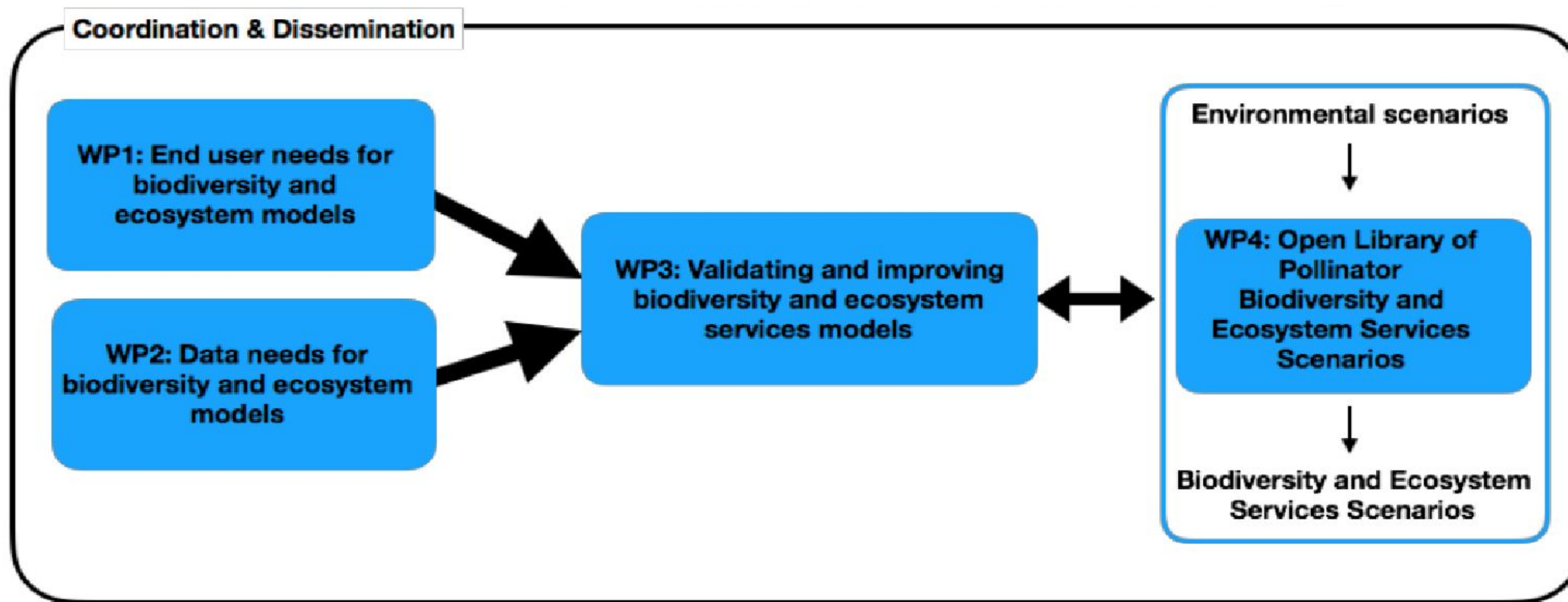


- OBServ will co-develop alongside relevant stakeholders a series of biodiversity scenarios that are useful for management and policy making by comparing the performance of different modeling approaches.
- We will compare the outputs of three different families of models based
 - (i) data mining
 - (ii) statistical relationships
 - (iii) mechanistic models,which will be parameterized using data available for four different countries located in three continents and validated with newly collected data



- Testing multiple modelling approaches is relevant for two reasons.
- First, different models may be suited for different questions, have different data requirements or need different levels of expertise. Hence, policy makers need more information on the trade-offs between model complexity and model accuracy
- Second, given the complex environmental issues we are facing, relying on just one model should be avoided. Comparing the output of independently developed models within the same system helps in detecting possible gaps and provides insights about the residual uncertainty in model predictions.







Thank you!