

BERISP

(Breaking Ecotoxicological Restraints in Spatial Planning)

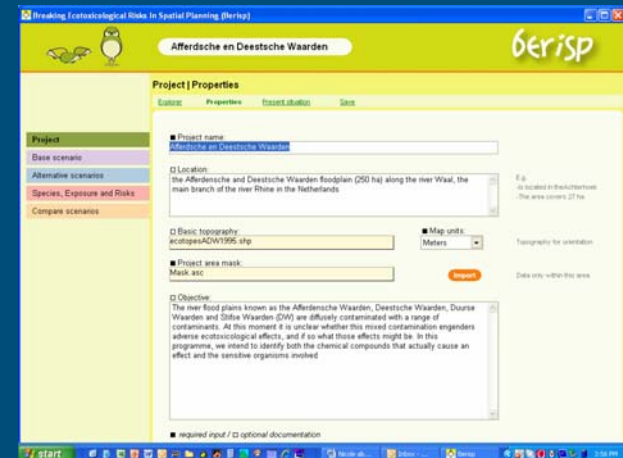
Nico van den Brink, Alterra Wageningen UR
Lieven Bervoets, University of Antwerp



Introduction

What is BERISP-DSS?

- Ecological risk assessment of contaminants to wildlife
- Consists of different models
 - Foraging behaviour
 - Foodweb accumulation
 - Habitat suitability
- Stand alone (windows), downloadable from www.berisp.org



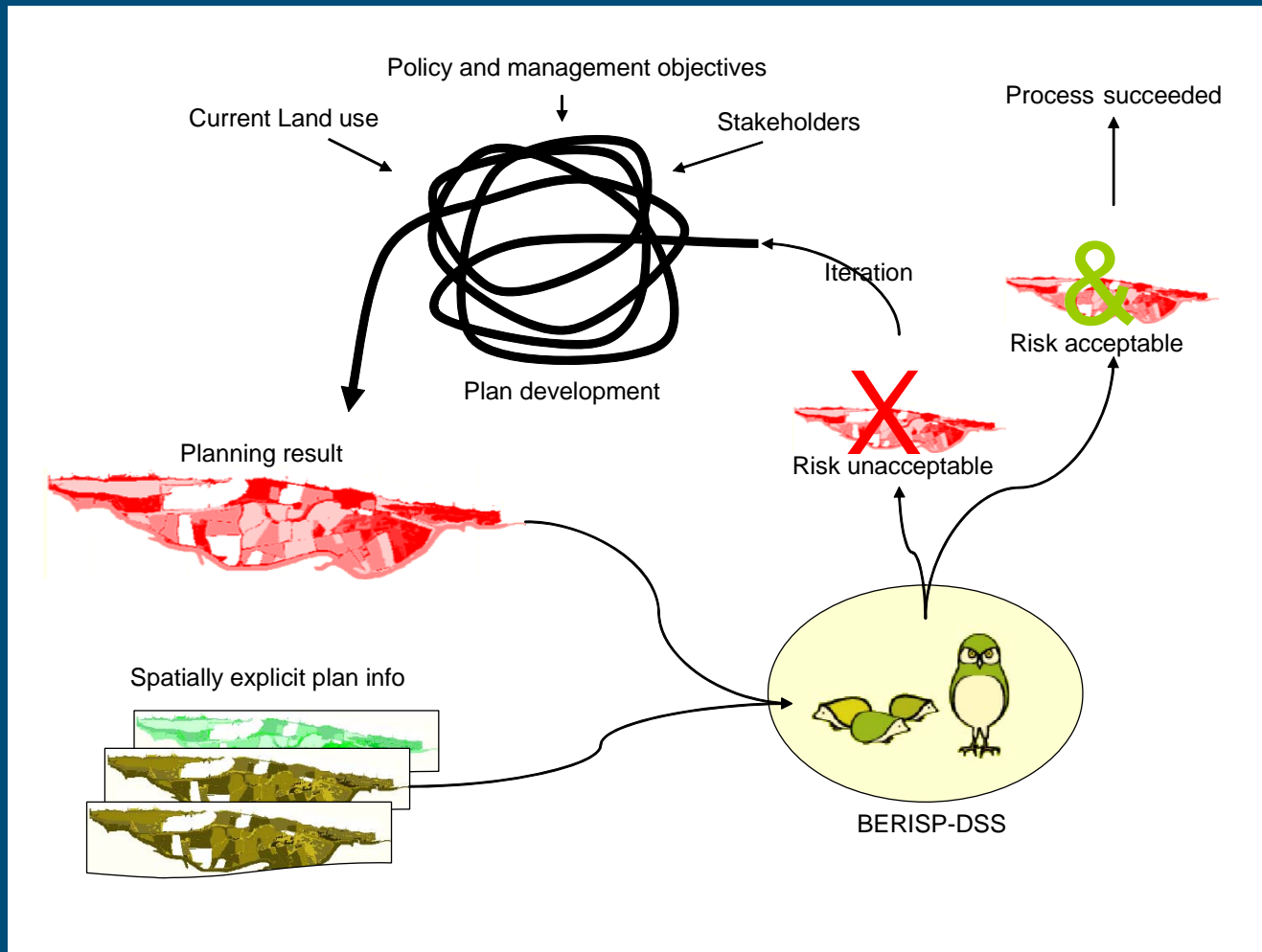
Introduction

Why a BERISP-DSS?

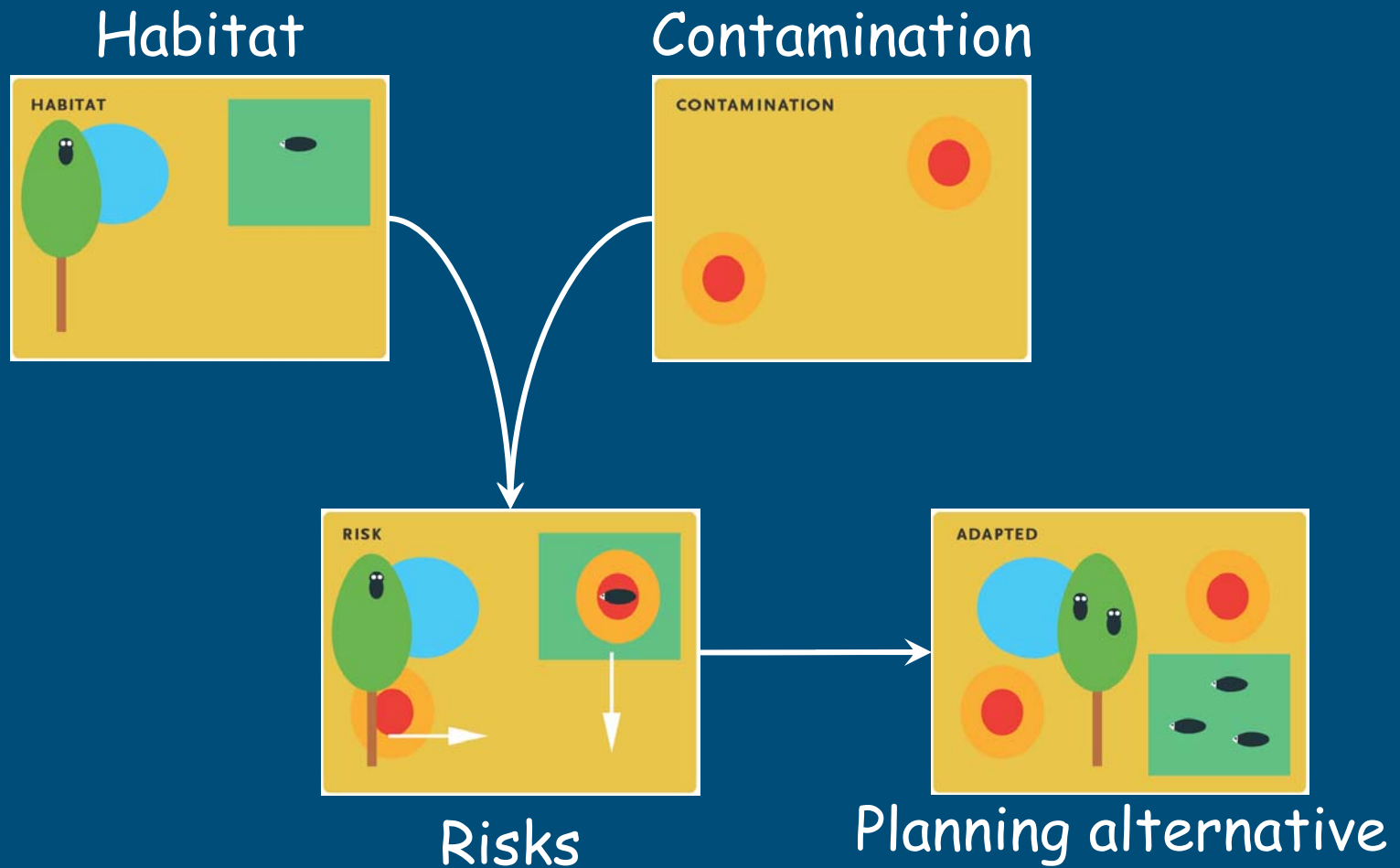
- Spatially explicit information needed in spatial planning processes
- Stakeholder participation
- Objective: to provide alternative solutions to soil contaminants



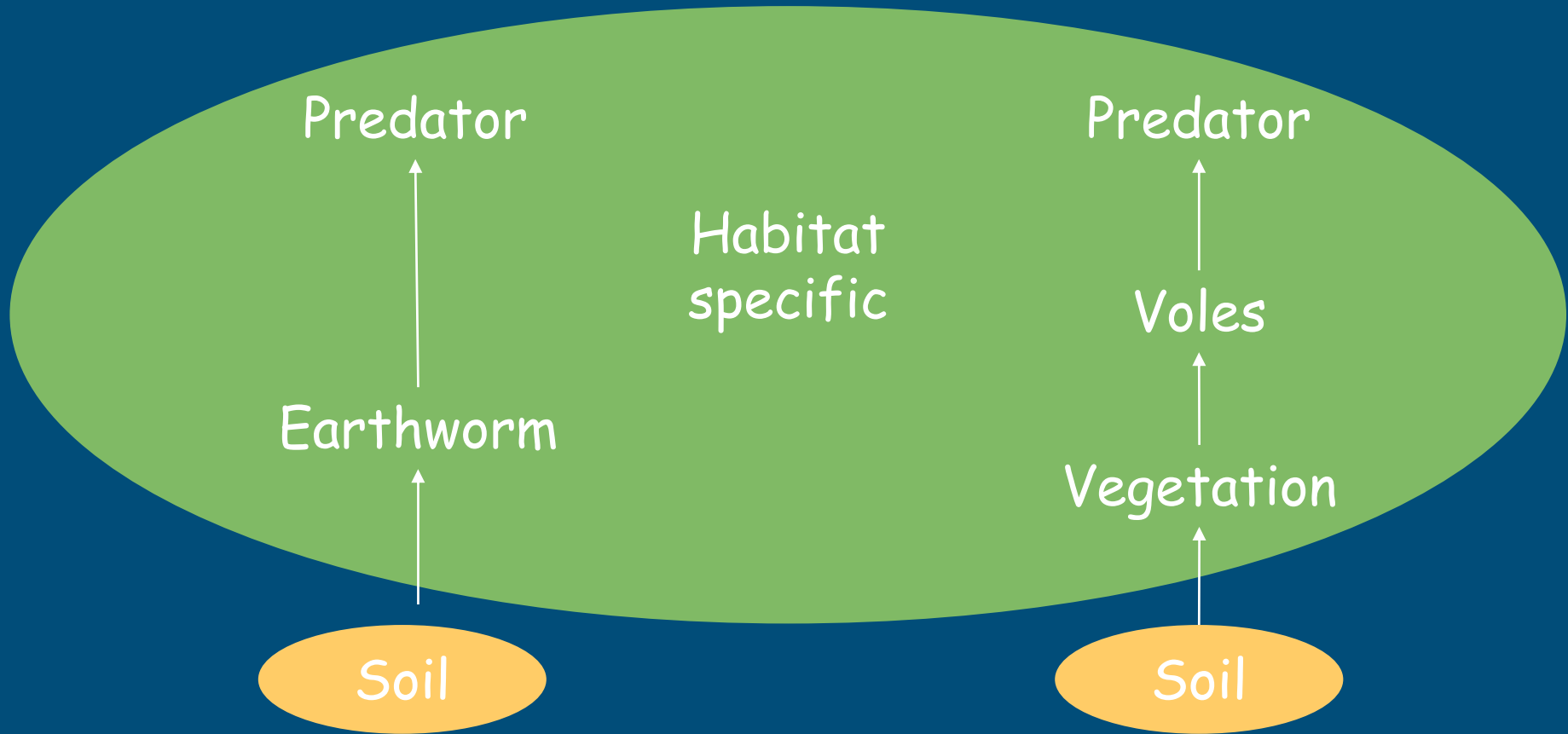
Stakeholder participation



Spatially explicit risks



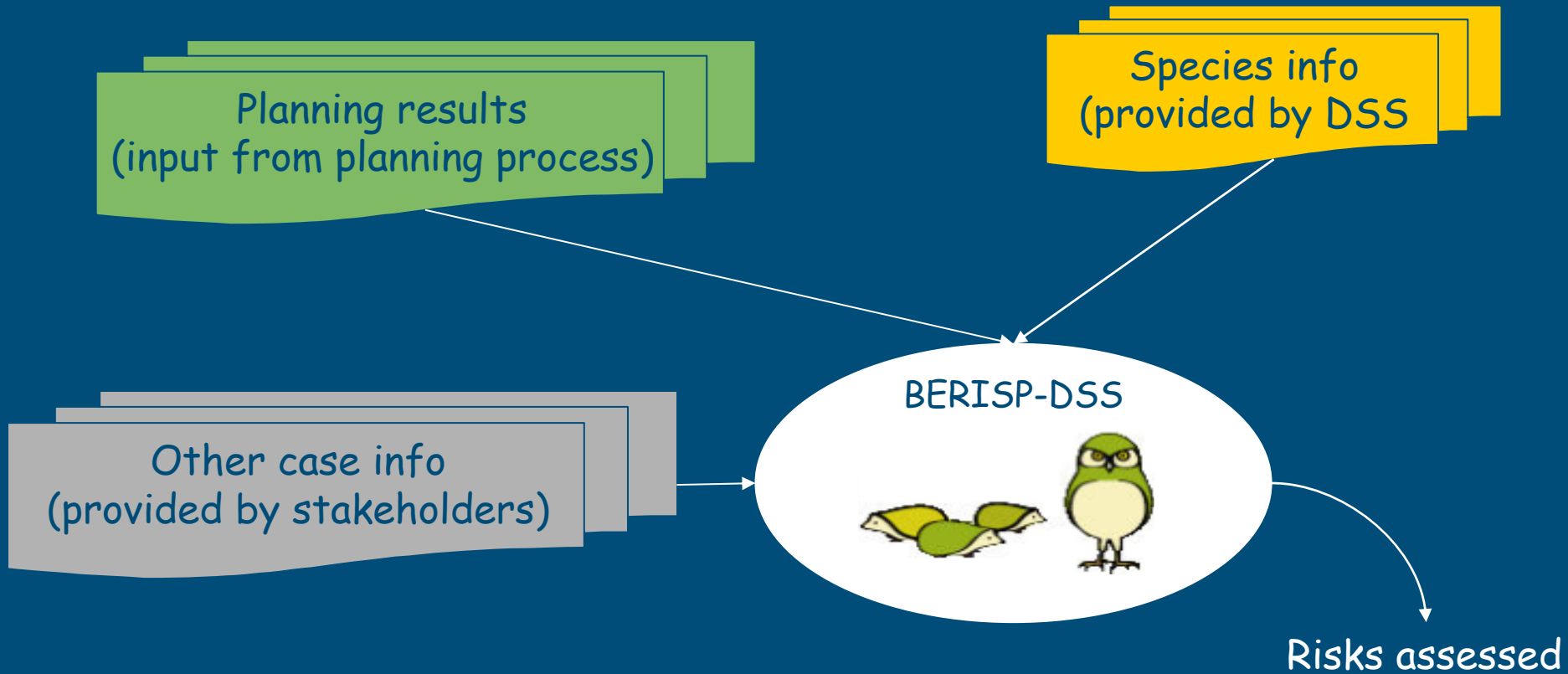
Food web approach



Effective accumulation

Less effective accumulation

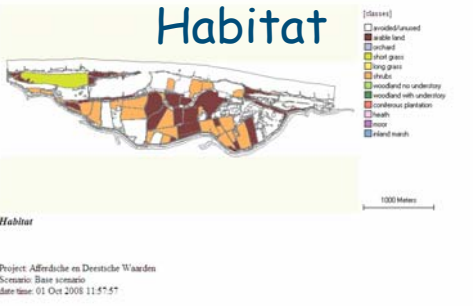
Data input



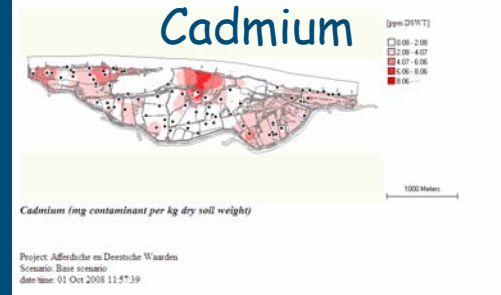
Species Endpoint

...

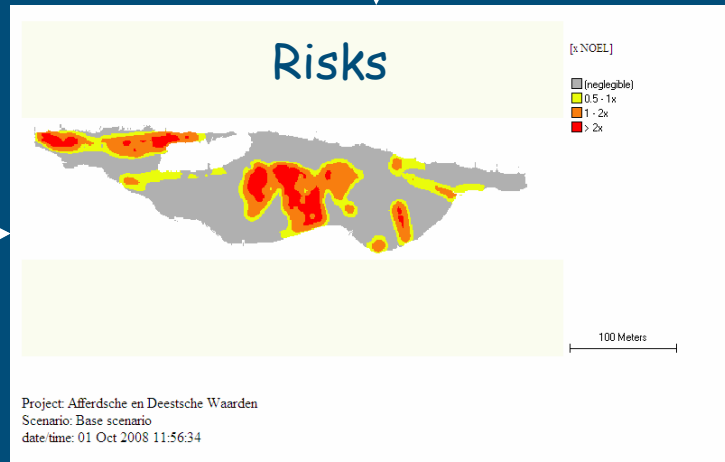
Habitat



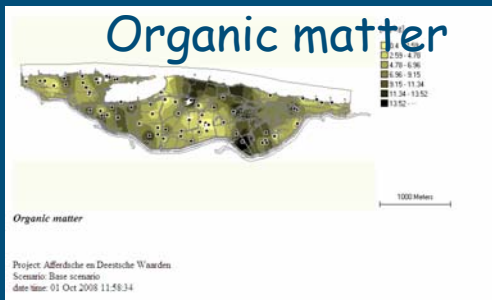
Cadmium



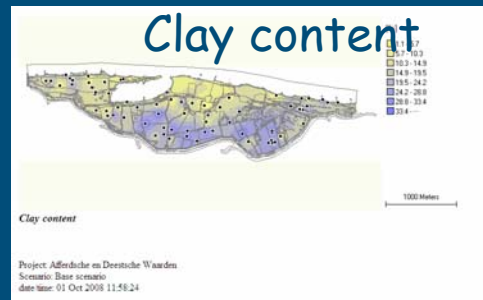
Risks



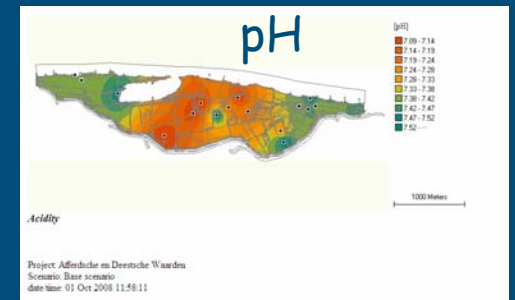
Organic matter



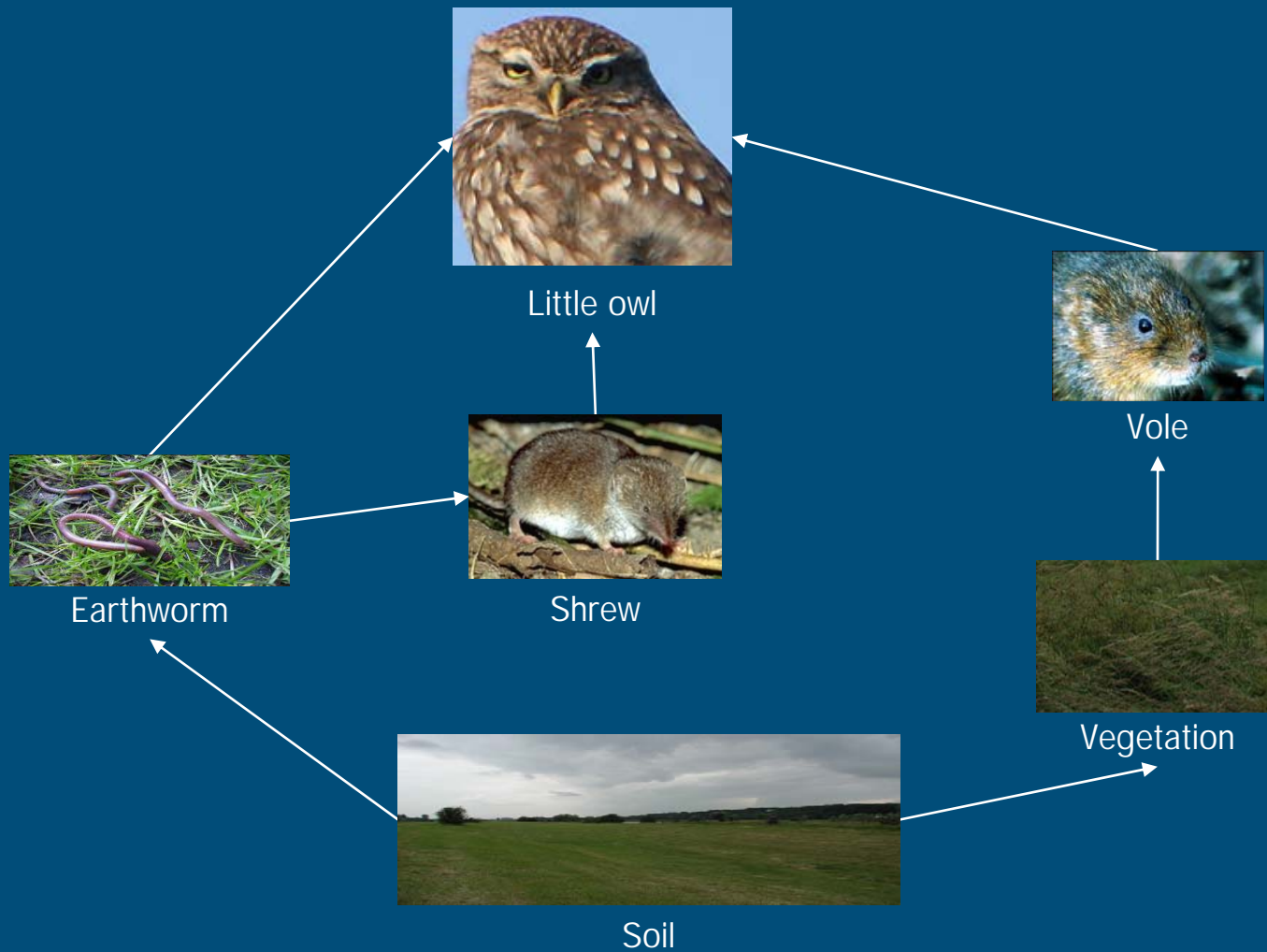
Clay content



pH



Food web approach



DSS demonstration



Shortcut to Berisp.exe.Ink



DSS application

Limitations:

- Risk based, not quality standard based (legislation)
- Liability and consecutive land use
- Limited to moderately contaminated areas
- Not directed to removal of contaminants, just dealing with them (functionalised to land use)

Pros

- Risk based, tailor made (Stakeholder participation)
- Alternative solution in addition to standard methods
- Less side effects
- Relatively cheap

DSS application

BERISP is decision support, not decision making!

Phases in decision making (mentioned by Laurent):

Identification phase

BERISP can help to identify risks in current situation (base scenario)

Development phase

Scenario analysis, intermediate results can be used to develop improved scenarios

Selection phase

Results input for final selection

DSS application

Developing and managing natural areas (military sites, surroundings of industrial sites (smelters))

Development of brownfields into natural or recreational areas

Development of green areas in residential areas

BERISP development

BERISP DSS is still under development (next version end 2008)

New developments:

- large grazers (diary and in nature)
- human risks (focused on children)
- new compounds

Acknowledgements



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Wim Dimmers (Alterra)

Thanks, go to www.berisp.org

The screenshot shows the BERISP website with a yellow header and navigation tabs for Objectives, Approach, Products, and Organisation. The main content area features a title 'Breaking Ecotoxicological Restraints in Spatial Planning (BERISP)', contact information for Nica van den Brink at Alterra, Wageningen UR, and a description of the project's goals. A diagram titled 'Model of the habitat of the title owl' is also visible.

berisp Borderless planning

OBJECTIVES APPROACH PRODUCTS ORGANISATION

Breaking Ecotoxicological Restraints in Spatial Planning (BERISP)

contact: **Nica van den Brink**
postaddress: **Alterra, Wageningen UR**
PO Box 47,
NL-8200AA Wageningen,
The Netherlands
phone: +31 (0)317 47 8877
e-mail: nic.vandenbrink@wur.nl

BERISP aims at the development of new approaches to problems in spatial planning associated with soil contamination. North-western Europe, with its high population density, faces increasing demands for open natural space. Many local authorities however, are currently confronted with problems regarding site development and soil pollution in for instance, river floodplains and brownfields. The main objective of BERISP is the development of a Decision Support System (DSS), which will allow an iterative procedure in spatial planning processes, in which planner can review different types of landscape uses and habitat distribution against scientific knowledge on risks of pollutants for organisms.

The DSS is now available for download!

BERISP brings together a transnational consortium, led by the University of Antwerp which includes major planning authorities, a leading organisation in brownfield development, and research organisations renown by their expertise on risk assessment. BERISP is funded by the European Community Initiative INTERREGIIS.

A new approach to soil contamination

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