



MANSCAPE

Integrated management tools
for water bodies in
agricultural landscapes

MANSCAPE - main partners

- **KBIN (coordinator - K. Martens)**
- **Univ. Liège (B. Losson)**
- **Univ. Namur (P Kestemont)**
- **K. Univ. Leuven (L. De Meester & L. Brendonck)**
- **Univ. Gent (W. Vyverman)**

MANSCAPE - objectives

Water is life: pools as unexploited resource

- biodiversity, ecosystem architecture, trophic structure in pools
- cost-effective methods for the development and use of monitoring techniques
- natural dynamic processes (colonisation, egg bank recruitment, genetic variability)

MANSCAPE - objectives

- Interactions between aquatic ecosystems and sectorial activities
 - (a) biotic typology
 - trematode parasitology
- integrated management plan
 - biodiversity indicators
 - integrity of landscapes
 - multiple user



MANSCAPE - tools

A green tree frog with dark spots is perched on a thin branch. The background is a soft-focus green, suggesting a natural habitat.

- Model organisms
 - flagships species
 - indicators: Bacteria to Amphibia
- Ecosystem analysis
 - bottom up vs top down
 - regional effects
- Dynamic aspects of biodiversity
 - colonisation & egg bank recruitment
 - genetic variability

MANSCAPE-expected results

- GIS-linked databases on water quality through biodiversity-related parameters, ecosystem health, regional effects, connectivity
- Typological monitoring protocols for small stagnant water bodies
- Descriptive model of external and internal colonisation dynamics (zooplankton)

MANSCAPE-expected results

- Data on incidence of trematode parasites related to small pools => agro industry
 - Geographic data on standing genetic diversity (zooplankton, Amphibia) => nature conservation measures
- => Management plan on sustainable use of aquatic resources in agricultural landscapes

A photograph showing three people in a field. One person is pointing at a map or document on a table, while the other two look on. The background shows a grassy field and a tree.

MANSCAPE - end users

- **Agro-industry**
 - water quality, trematode parasites
- **Nature conservation**
 - connectivity of biotopes
 - genetic diversity of model groups
- **Policy makers in governments**
 - identify and monitor sensitive areas