

WETLANDS MANAGEMENT IN SLOVENIA

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BACKGROUND & RATIONALE

- 6 sites ► 6 different (types of) wetlands ► 6 different approaches to restoration and management
- habitat management should **follow the ecological needs** of present animal and plant species & habitats
- every wetland locally and regionally important, some under significant pressure ► a need to **identify priority areas** for protection and management (endangered species, biodiversity "hotspots")

WETMAN

CHALLENGES TO WETLANDS RESTORATION & MANAGEMENT

- different (types of) wetlands, no direct comparison of experience
- planning by sectors (missing the bigger picture)
- administrative obstacles (legal issues, ownership, small plots)
- "possessive" (exclusive) stakeholders, lack of support
- long-term effects of wetlands restoration on fauna, flora & habitat???

QUESTION: How to ensure long-term sustainable management of wetlands in Slovenia using the experience from WETMAN project?

WHAT HAS WETMAN DONE?

THREATS: abandonment of use in the past, inappropriate interventions in the past, destruction of habitats, overgrowth, presence of invasive fish species

- assessment of the population of target species
- assessment of expected impacts of planned activities
- improved state of habitats and populations of (target) species
- establishment of long-term management (sectoral planning, volunteers)
- awareness raising (documentary, fieldwork with schoolchildren, volunteer base)

**ADDED
VALUE**

- information-system (IS) for management of Nature 2000 sites
- strengthened (in)formal inter-sector cooperation

HOW HAS WETMAN DONE IT?

Research & survey

- monitoring – the basis for determination of locations and methods of interventions
- ground probing
- ground-water level monitoring

Physical interventions

- considering the hydrological conditions
- use of professionals (national institutes) & volunteers (Slovenian armed forces, Alpine clubs,...)

Communication

- project group
- stakeholders, supporters
- (sub)contractors
- professional institutions
- general public (news articles, TV documentary, TV & radio shows)



GORNJI KAL / karst ponds



Emys orbicularis (sub)population stranded in unsuitable habitat.

/ 2 ponds renaturated, 1 pond re-created, *Emys orbicularis* repopulated /

MURA / oxbow lakes



No formation of new and accelerated disappearance of existing oxbow lakes due to changed hydrology of the Mura river.

/ 2 oxbow lakes renaturated, invasive fish species reduced /

PLANIK / marshy meadows



Abandonment of agriculture is leading to overgrowth, drainage ditches are causing the marsh to dry.

/ overgrowth removed, wooden dams constructed, grazing reintroduced /

POHORJE / peat bogs



Drying bogs are slowly turning into forest.

/ wooden dams constructed, water basins dug, foot-path (re)constructed, overgrowth removed /

VRHE / marshy forest



Overgrowth is covering *Liparis loeselii* habitat.

/ hydrology improved, overgrowth removed /

ZELENCI / river spring



How much should we intervene with (natural) processes, fundamentally altered by people?

/ gravel-barrier constructed, management plan adopted, overgrowth removed /

WHAT'S NEXT?

- uniform approach to wetlands / Nature 2000 sites management (use of IS)
- future evaluation of (potential) threats to wetlands
- manage & evaluate impacts of implemented activities (LIFE after LIFE)
- **ultimately: preserve wetlands for next generations (of animals, plants, people)**

CONCLUSIONS

- carefully **plan** every activity on wetland (effects on species, ground-water level, overgrowth, visit...)
- research and **communication** lead to a WIN-WIN situation
- **restoring and managing the wetlands is a learning process!**

WANT MORE INFORMATION?

- visit the project web site
<http://www.wetman.si/?lang=en>



- email Matej Simčič at matej.simcic@zrsvn.si or Aleksander Koren at aleksander.koren@zrsvn.si

AUTHORS OF THE PHOTOGRAPHS

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