Natura 2000 Biogeographical Process Mediterranean Kick-off Seminar

Coastal Habitat management Case Studies

Thessaloniki, Greece – 26 to 28 May 2014, Graziano Caramori
Coastal Habitat Case Studies

1) LIFE10 NAT/IT/256 – Mc-Salt
2) LIFE09 NAT/IT/110 Conservation of habitats and species in the Natura 2000 sites in the Po Delta
3) LIFE13 NAT/IT/000115 - AGREE "costal lagoon long term management"
4) Working Scale
CASE STUDY 1 – Partners, project's area

LIFE10 NAT/IT/256

1, Po Delta Park E-R, ITALY
2, Molentargius Park, ITALY
3, Parc Camargue, FRANCE
4, Green Balkans, BULGARIA
5, CSME, FRANCE
6, Tour du Valat, FRANCE
ADDRESSING SPECIFIC ENVIRONMENT:
SALTWORKS
Both working and abandoned
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SALTWORKS
Both working and abandoned
Main Habitat hosted
1150* Coastal lagoon – the highest proportion
1510 Mediterranean Salt Steppes*
1310 *Salicornia* and other annuals colonizing mud and sand
1420 Mediterranean halophilous scrubs (*Sarcocornetea fruticosi*)
2120 Shifting dunes along the shoreline - Bulgaria
THREATS LIFE10 NAT/IT/256

1) Progressive decline in water circulation
2) Aerial powerline (birds collision);
3) Lack of nesting site;
4) Disturbance from yellow legged Herring gull (*Larus michahellis*).
5) Invasive alien species – Bulgarian site
1) Hydraulic restoration methods
   a) "Traditional" for saltworks, including channel dredging, sluices and embankments restoring according to local habits.
   b) Natural water circulation, by gravity, at Camargue site, abandoned saltwork, 5,000 ha possible to the vast area
ACTIONS

2) Aerial Power line collision method
   a) Burying of powerline, by specific machine or traditional digging
LIFE10 NAT/IT/256
Before the works
The new landscape
LIFE10 NAT/IT/256
3) Lack of nesting site methods
   a) "Traditional" building of nesting islets with material from the bottom, some variation on protection of the islet.
   b) Rafts - only in Bulgaria saltworks for anatidae
Still on monitoring but apperas efficients, depending on the targeted species.
4) Disturbance from yellow legged Herring gull (Larus michahellis)
   a) Scarey man
   b) Net protection

Monitoring on course,
Guideline on course
Nesting sites protection

Experimental protection from

Scarey-man

Larus michaellis

Author: Júlio Reis
5) Invasive alien plant species
   a) Manual removal

Appears efficient, but was at small scale
Manual removal invasive plant on dune, Bulgaria, Pomorie lake
LIFE10 NAT/IT/256
More information

http://www.mc-salt.eu
CASE STUDY 2 – Partners, project's area

Coordinating:
Delta del Po Park Emilia-Romagna Region

Partner:
Delta del Po Park Veneto Region,
Reclamation Consortium Veneto Agricoltura,
WWF Italy
ADDRESSING COASTAL LAGOONS OF PO RIVER DELTA

Main Habitat hosted

1150* Coastal lagoon – the highest proportion;

1510 Mediterranean Salt Steppes*

1310 *Salicornia* and other annuals colonizing mud and sand

1410 Mediterranean salt meadows (*Juncetalia maritimi*)
1) Progressive decline in water circulation;
2) Lack of nesting site (erosion);
1) Hydraulic restoration methods
   a) "Traditional" including channel dredging, and sluice gates restoring according to local habits.
2) Lack of nesting site
a) "Traditional" building of nesting islets, using the sediment dredged from the channels.

Suggestion: shell on the nesting site or even used for building the nesting site!
MEZZI DI ESCAVO DEI CANALI/RICARICO DOSSI e ARGINATURE

escavatore su pontone

draga a refluiizione
LIFE09 NAT/IT/110

More information

http://www.parchideltapo.it/life.natura2000.po.delta/
CASE STUDY 3 – Partners, project's area

Po river delta Goro Lagoon

Will be implemented starting June 2014
ADDRESSING COASTAL LAGOONS OF PO RIVER DELTA
Main Habitat hosted
1150* Coastal lagoon – the highest proportion;
1110 Sandbanks which are slightly covered by sea water all the time
1420 Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)
THREATS
LIFE13NAT/IT/000115

1) Progressive decline in water circulation;
2) Lack of nesting site (erosion);
ACTIONS
LIFE13NAT/IT/000115

1) Hydraulic restoration methods
a) "Traditional" channel dredging,
b) Innovative, adaptation to natural processes dynamics, by the implementation of a submerged structure to direct southern the growth of the outer sand bank
2) Lack of nesting sites
   a) "Traditional" building of nesting islets, using the sediment dredged from the channels.
LIFE13NAT/IT/000115
More information

Sorry, web site not yet available,

the project will start on 1st of June 2014!
TRADITIONAL METHODS

Restoring water circulation, associated to nesting sites building
INNOVATIVE METHODS

Project developed according to the principles of the ICZM (Integrated Coastal Zone Management),

The LIFE13NAT/IT/000115 project has: an ecosystem approach to the functioning of the lagoon, including the biotic and abiotic components, an holistic point of view considering the effects of coastal dynamics on biodiversity conservation, on economy and on hydraulic safety, a vision of long-term management and sustainable development.
INNOVATIVE METHODS
Integration from economical point of view:

LIFE10NAT/IT/256 – Mc-Salt
and
LIFE13NAT/IT/000115 - AGREE
Both have private partner which contribute to the project:
451,355 €
437,290 €
CASE STUDY 4 – Working scale

Coastal erosion
4 – Working
CASE STUDY 4 – Working scale Coastal erosion
COASTAL HABITAT

Sometime could be necessary managed at the hydrographic basin level

Water framework directive
THANK YOU
FOR YOUR ATTENTION

www.istitutodelta.it

Graziano Caramori