



RI.CO.PR.I. PROJECT

Life 09 NAT/IT/000118

NETWORKING ACTIVITIES

CONCRETE CONSERVATION

ACTIONS

SCI DOLOMITI LUCANE



Networking workshop
Rome, 14th – 15th May 2013



The partner “Parco Regionale Gallipoli Cognato Piccole Dolomiti Lucane

- The regional Park Gallipoli Cognato Piccole Dolomiti Lucane covers a surface of 27.000 hectares.
- It is located in the Southern Apennines in the Middle of Basilicata, between the 2 provinces of Matera e Potenza. The park presents different habitats, most of them mountains;
- It covers the municipalities of Accettura, Oliveto Lucano, Calciano Pietrapertosa and Castelmezzano



Networking workshop
Rome, 14th – 15th May 2013





Main natural and scientific activities carried on by the Park:



Mammalian Fauna:

- Reintroduction of Italic Roe Deer (*Capreolus capreolus italicus*);
- Reintroduction of Italic Hare (*Lepus corsicanus*);
- management of the population of Wild Boar (*Sus scrofa*);
- Study of the fauna species threatened with extinction

ORNITHOFAUNA:

- Study of the birds population through the method of scientific ringing;
- Study of the population of the “Eagle of the snakes” (*Circaetus gallicus*) through satellite telemetry;
- Study of the biology and population of the Black Stork (*Ciconia nigra*).



Networking workshop
Rome, 14th – 15th May 2013





The SCI “Dolomiti di Pietrapertosa”

The targeted area is part of the geological complex called “Dolomiti Lucane”

The "Dolomiti", so called because their peaks are characterized by high heights remembering the Alpine Dolomite. They are made of outcrops of quartz-feldspatic sandstone created 15 millions years ago.

The SCI goes from an altitude of 450 above the sea level to a peak of 1.319 a.s.l.

The 85% of the area is covered by forest of oak, shrubs and shrubby grassland.

Among the most important flora species we can find:

Populus tremula (Poplar)

P. nigra, (Poplar)

Acer spp. (Maple)

Fraxinus angustifolia (Ash tree)

Carpinus orientalis (Hornbeam)

Ostrya carpinifolia

Quercus cerris (local oak)

Ilex aquifolium (Holly)



Networking workshop
Rome, 14th – 15th May 2013





Concrete Conservation Actions

✿ C1 Shrubs Removal

The action is characterised by the selective removal of those shrubs that during the years have invaded the surfaces of the habitats 6210 and 6220. The activity is carried on using mechanical instruments (such as chain saws) and by hand, by qualified workers under the direction of an expert.

The action takes place in two periods: Autumn/Winter 2012 – Winter/Fall 2014



Networking workshop
Rome, 14th – 15th May 2013





Concrete conservation actions

✿C1 Shrub Removal

The removal is necessary to recover almost 19 hectares of dry grasslands invaded by shrubs, areas which are next to disappear.

We remove:

- *Spartium junceum*
- Shrub of *Quercus cerris* and *Quercus frainetto*

Furthermore this action is necessary to improve the habitat of important butterflies such as *Melanargia arge*, which prefers open grassland with scattered shrubs and few trees and *Eriogaster catax*, which prefers open grassland.



Networking workshop
Rome, 14th – 15th May 2013





Concrete conservation actions

✿C2 Eradication of exotic species

The action consists in the eradication of invasive exotic species such as *Robinia pseudoacacia* and *Ailanthus altissima* and the nitrophilous ruderal species of *Silibum marianum* and *Onopordum acanthium*, which have invaded the site during the last years.

The invasion of natural habitats by exotic species is one of the main threaten of the biodiversity. *Robinia pseudoacacia* and *Ailanthus altissima* are 2 species with a high capacity to expand and they are “exploiting” the open spaces of the grassland. Their eradication is necessary to obtain a complete recover of the two habitats.



Networking workshop
Rome, 14th – 15th May 2013





Concrete conservation actions

✿ C3 Improving of pasture structures

This action will carry out the functional renovation of 6 drinking troughs. These troughs are necessary to promote the homogeneous distribution of cattle in the grassland, reducing the concentration of animals next to the operating troughs which cause the degradation of the habitats.



Networking workshop
Rome, 14th – 15th May 2013





Concrete conservation actions

✿ C3 Improving of pasture structures

The works now carrying on are:

- remodelling of the water-drainage lines, improving the convergence of the water towards the trough.
- Improving of the drainages;
- construction of 4 troughs so to be able to let the cattle drink
- restoration of 2 existing troughs
- coating of the structure with local stones to allow a correct integration in the landscape;
- Creation of muddy areas and mounting/descending ramps for amphibians.



Networking workshop
Rome, 14th – 15th May 2013





Concrete conservation actions

✿ C5 Application of pasture plans

From the available studies, we know that pasture is fundamental for the maintaining of the semi-natural grassland.

But often pasture is excessive and this happens when:

- a) The number of animals is overcharged compared to the surface:
- b) The period of pasture is too long on a particular surface
- c) There is over-pasture in specific areas.

The effects of over-pasture are:

- Raw surface (absence of grass turf);
- Increasing of the % of covering by nitrophilous species and invasive shrubby species;
- Reduction of the zootechnical productions



Networking workshop
Rome, 14th – 15th May 2013





Concrete conservation actions

✿ C5 Application of pasture plans

How do we fight over-pasture:

a) Avoiding pasture

We avoid pasture by implanting fixed enclosures made of chestnut poles and electrified barbed wire along an area of almost 6.000 mt.



Networking workshop
Rome, 14th – 15th May 2013





Concrete conservation actions

✿ C5 Application of pasture plans

How do we fight over-pasture:

b) Allowing pasture rotation

We allow pasture rotation by implanting mobile electrified enclosures during the period of maximum growth of the grassland and removing them in winter times. This activity is carried out by local farmers.



Networking workshop
Rome, 14th – 15th May 2013





Concrete conservation actions

✿ C6 Harvest and conservation of seeds *ex situ*

In July 2012 we have harvested grass seeds suitable for both habitats. We have collected seeds from species mostly belonging to the family of *Poaceae*.

The main species are:

- | *Brachypodium rupestre*;
- Bromus erectus*;
- Bromus hordeaceus*;
- Cynosurus cristatus*;
- Dactylis glomerata*
- Festuca circummediterranea*;
- Anthoxanthum odoratum*;
- Phleum pratense*



Networking workshop
Rome, 14th – 15th May 2013





Concrete conservation actions

✿ C6 Harvest and conservation of seeds ex situ

Once harvested, seeds have been stored in a hot and airy place to let them dry and separate the seed from the straw.

We have obtained almost 7 kg of seeds, most of them to be used in the next action.



Networking workshop
Rome, 14th – 15th May 2013 o





Concrete conservation actions

#C7 Naturalistic engineering and sowing of the seeds species belonging to the habitats.

Different areas of the grassland present evident phenomenon of erosion, partly caused by over-pasture, partly caused by the erosive action of the water.

The over-pastured eroded areas will be recovered by sowing the species belonging to the habitats.

The remaining eroded area, characterised by surface erosion such as creep and water erosion, will be consolidated with naturalistic engineering techniques and through the use of materials found in the place (such as stones and timber coming from the cutting of shrubs).



Networking workshop
Rome, 14th – 15th May 2013





But our Park is also involved in **Preparatory actions and Demonstrative and Communication actions** such as:

✿A4 Estimation of the economic value of the 2 habitats

The estimation has considered the aspects connected to the production activities (such as dairy milk production) but also the value of the SCI in terms of ecosystemic services and landscape elements, using study and models such as the System for Environmental and Economic Accounting, the Millennium Ecosystem Assessment.

To estimate the eco-systemic cultural services we have collected interviews distributed to the tourists that attend the SCI area.

From these interviews we understand that:

- 98,75% doesn't know what a SCI area is. They never heard talking about Natura 2000 Network or Habitat and Birds Directives.
- 62% of the interview visited Pietrapertosa for the interest toward Dolomiti Lucane
- 38% visited Pietrapertosa to practice extreme sports (Volo dell'Angelo)
- 87,5% denounce a low communication both in brochures and on the web



Networking workshop
Rome, 14th – 15th May 2013





and:

✿D4 Implementation of information panels

Realized 39 panels, located in strategic points within the 3 SCI involved.

These panels are useful to:

- inform and make aware tourists and local inhabitants about the damages caused by an irresponsible fruition of the areas,
- inform about the reasons why these habitats are so important to safeguard.



Networking workshop
Rome, 14th – 15th May 2013





And also:

✿D6 Environmental education in schools

Face to face meetings in school and on-field experiences with the scholars of the municipalities where the habitats insists on, in order to:

- make the new generations aware of the importance of such sites, sometimes considered to be marginal
- Describe in simple words the importance of the network Natura 2000



Networking workshop
Rome, 14th – 15th May 2013





Thank you for your attention....



...and arrivederci here!!!



**Networking workshop
Rome, 14th – 15th May 2013**

