LIFE12 NAT/IT/000818 XERO-GRAZING

Semi-natural dry-grassland conservation and restoration in Valle Susa (NW Italy) through grazing management

Giampiero Lombardi
University of Torino

Consolata Siniscalco
University of Torino

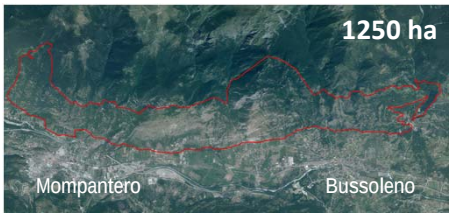
Bruno Aimone
Alpi Cozie Park Management Authority
coordinating beneficiary

Anna Maria Allasio
Municipality of Bussoleno

Piera Favro
Municipality of Mompantero

Marcello Miozzo
D.r.e.a.m. Italia

SCI IT1110030 *"Valle di Susa - Orrido di Chianocco e Foresto xerothermic oases"*

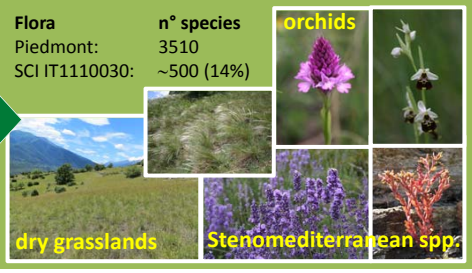


A "handmade" landscape… *abandoned since 1960*

A *tiny* Mediterranean oasis…

altitude:	470-1630 m
aspect:	S-SW
mean slope:	58%
substrate:	limestone
rainfall:	800 mm y^{-1}
rainy days:	77/365
water shortage:	9 months
mean temperature:	11.3°C
mean winter temp.:	3.6°C
windy days:	325/365

Flora	**n° species**
Piedmont:	3510
SCI IT1110030:	~500 (14%)



…..an extraordinary biodiversity…

- ✓ habitat 6210* Seminatural dry grasslands and shrubland *facies* on calcareous substrates (*Festuco-Brometalia*) *important orchid sites
- ✓ habitat 6240* Sub-Pannonic steppic grasslands
- ✓ 23 species of orchids
- ✓ Steno- and Eurimediterranean species and endemisms

…. *threatened by:*

- ✓ absence of agricultural activities & livestock farming
- ✓ shrub encroachment (e.g. *Prunus spinosa*)
- ✓ afforestation (e.g. *Quercus pubescens*)
- ✓ wild fires
- ✓ land use changes

OBJECTIVES

Establishing a long-term conservative management in areas where there is little productive interest but high natural value

- ✓ implement a grassland management on 80 ha of public land based on sheep grazing
- ✓ restore shrub and tree-encroached grasslands by mechanical clearing and cutting
- ✓ involve local authorities and stakeholders in managing high value areas
- ✓ increase the awareness on the use of natural resources by promoting educational activities

ACTIONS

Preparatory actions

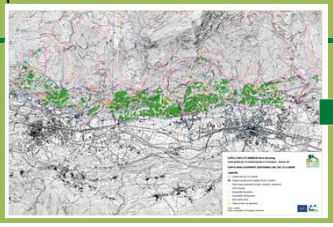
A1 Conservation status assessment for the 6210* habitat
A2. Analysis of past to present management
A3. Guide-lines for the habitat conservation and restoration
A4. Technical actions for the habitat conservation and restoration
A5. Establishment of a monitoring network for the habitat

- ✓ **261 vegetation surveys** (network of 189 permanent transects to be repeated every year)
- ✓ **352 ha** (30% of SCI surface) **covered by two priority habitats 6210*** (53%) and **6240*** (47%)
- ✓ **40 species rare, protected, or included in Red Lists**
- ✓ **70% of grasslands encroached by shrubs or trees**
- ✓ **360 ha** (30% of SCI) **covered by terraces** and cultivated in the past centuries
- ✓ **only 37 ha** (3% of SCI) **cultivated at present!**

- ✓ **grassland management guide-lines** focused on the entire SCI and other Natura 2000 areas
- ✓ **grassland management plan** with concrete actions to be applied for the conservation and restoration of 80 ha of grasslands

Concrete conservation actions

C1. Restoration of parts of the habitat
C2. Arrangement of grazing equipment for conservative management
C3. Buying of domestic animals for the conservative management
C4. Restoration of the access to grazed areas
C5. Application of grazing management guide-lines



- ✓ mechanical **clearing and cutting on 20 ha** of grasslands encroached by shrubs and trees
- ✓ **restoration of trails** to assure access to grazing areas

- ✓ **permanent let-down fences** (wildlife friendly), **underground water pipes**, and **waterers** arranged on the grazing area

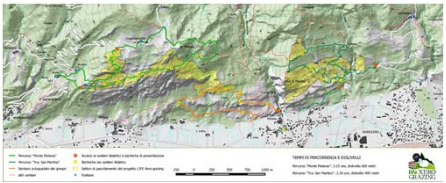
- ✓ **"service flock" of 150 sheep** bought by the coordinating beneficiary
- ✓ **grazing implemented on 80 ha of public lands + 20 ha of private lands** granted by owners (thanks to dissemination actions!)

Monitoring of the impact of the project

D1. Monitoring of action effects on the vegetation
D2. Monitoring of action effects on orchids and Stenomediterranean rare species
D3. Monitoring of action effects on socio-economic aspects and ecosystem services

Public awareness and dissemination actions

E1. Notice boards and information panels
E2. Conferences and seminars
E3. Publication of the project
E4. Website of the project
E5. Activities of public awareness and dissemination



- ✓ **2 educational trails** on xerothermic grasslands designed and arranged
- ✓ **meetings**, **workshop**, **conferences**, and **educational activities**