2nd Mediterranean Plant Conservation Week
Session 3 - *Ex situ* and *in situ* plant species conservation: collaborations, strategies, communication

**CARE-MEDIFLORA project, experiences with stakeholders and collaborations with administrations and landowners**

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Supported by:
INTRODUCTION

- The Mediterranean Basin is one of the world’s most biodiverse regions.

- Roughly 30,000 different plant species, of which approximately 13,000 cannot be found elsewhere (43% Mediterranean endemics) (10% of the world plants).

- This region has been included among the world’s 34 biodiversity hotspots.

- Higher level of endemics than in mainland floras.

But plant species are vulnerable to many threats and some of them require urgent protection measures.
CONSERVATION PROJECT FOR RARE AND ENDANGERED MEDITERRANEAN ISLAND PLANTS USING IN SITU AND EX SITU CONSERVATION ACTIONS
OBJECTIVES OF THE PROJECT

Integrating *ex situ* and *in situ* conservation

Using *ex situ* activities to improve *in situ* conservation

I. Target species selection
II. In situ conservation actions
III. Ex situ conservation actions

IV. Networking and communication activities
   i. Stakeholders network
      i. Landowners
      ii. Administration
      iii. Scientifics

WHAT METHODS AND MEANS TO ACHIEVE THE ABOVE?
NETWORKING AND COMMUNICATION ACTIVITIES

Important points to get:

✓ Monitoring *in situ* actions for a long time after the project.

✓ Share results and experience with STAKEHOLDERS NETWORK.

✓ Get agreements with ADMINISTRATION and local GSPC FOCAL POINTS to contribute to nationals reports for:
  o **Target 5**: at least 75% of IPAs protected, managed
  o **Target 7**: 75% of threatened plants conserved *in situ*.
  o **Target 8**: 75% of threatened plants in *ex situ* collections. Country of origin. 20% available for recovery plans.
In situ conservation actions

A3 - In situ conservation actions

Ex situ conservation actions

A4 - Ex situ conservation actions

Involves all the actors and especially the local actors to ensure the sustainability of actions.

Promote the transfer of experience and information:
- Among the partners of the CARE-MEDIFLORA project, and
- Among all the relevant stakeholders of the Mediterranean Basin (i.e. GENMEDA)
• In total, a large number of partnerships and links with local actors within the framework of the program

Private owner/manager

Public owner/manager

Local communities:
- Municipality Council administration
- Communities of Commons
- Territorial Collectivity

Other regional organizations:
- Nature reserve
- National Park
- Regional Natural Park
- Forest service
- Archeological service

State services:
- Coastal Conservatory
- Road services administration
- Department of Public Maritime Domain

Private owner/manager

Public owner/manager

Local communities:
- Mallorca
- Corsica
- Sardinia
- Sicily
- Crete
- Cyprus

Other regional organizations:
- Nature reserve
- National Park
- Regional Natural Park
- Forest service
- Archeological service

State services:
- Coastal Conservatory
- Road services administration
- Department of Public Maritime Domain
EXAMPLES AND RESULTS

Elaboration of actions

Working close to:

1. Administrations (national and / or regional)
2. Landowners / local partners
3. Managers
4. Researchers / scientific community
1. Working with national and local administrations

- To obtain legislative and regulatory authorizations

  Procedures more or less long and complex according to the regulations of different states

  - **Corsica, Crete**: regulation on the protected species strong: many necessary authorizations
  - **Mallorca**: authorization needed for legally protected species and from legally protected land.
  - **Sardinia, Sicily**: no authorization for selected plant species needed
  - **Cyprus**: No authorization needed

- Links with other framework documents

  *(Natura 2000, National or Regional Action Plan (PNA), Management Plan)*

  - **Mallorca**: 3 actions related to Natura 2000
  - **Corsica**: 3 related to Natura 2000, 2 actions related to PNA
  - **Sicily**: 8 related to Natura 2000
  - **Crete**: 8 related to Natura 2000
  - **Cyprus**: 9 related to Natura 2000
2. Working with landowners

- Most of the operations were carried out on public land (82%):
  - Difficulty to contract with private owners (exception: Mallorca)
  - Difficulty to mobilize public credits to finance actions on private land
3. Working with local managers

- The choice of partners was oriented towards collaboration with sustainable management structures
  - Monitoring is essentially done by public partners (87%). Very few operations followed by associations or private (13 %)
4. Working with scientists and local actors

• Numerous exchanges with local scientists during the development of actions:
  ✓ Regional Scientific Council,
  ✓ Botanists,
  ✓ Conservation Specialists

• Numerous exchanges between project partners and GENMEDA network

Convention with a climber (for regulation of the activity), public information on the site by the managers. Corsica.

GENMEDA Meeting - May 18, 2017
Botanical Garden of the Rome University ‘La Sapienza’
Website of the project.

www.care-mediflora.eu
Exchange trips among partners
TRAINING, INFORMATION, COMMUNICATION

Manager Training

Ex situ practical training at BG-SAR
Information for local actors and the general public

(local media: TV, newspaper, radio, social networks, production of information material, local events, information on site by managers)
Scientific publications, symposiums, congress assistance...

PDF] Seed conservation actions for the preservation of plant diversity: the case of Care-MeditFlora (G-SAR)

M. Kyritzis, C. S. Christodoulou, G. Bacchetta - sciencedeviation

Abstract The Mediterranean Basin is one of the world's most biodiverse regions, roughly counting 30,000 different plant taxa, of which approximately 50% are endemic to the region. Thus, this area has been recognized among the world's 34 biodiversity hotspots. The introduction of Yellow gentian on Mount Genziana, CE, Sardinia, Italy, A. Cuenca-Lombrana..., 2018. Case studies ..., 2018 - researchgate.net

The translocation was firstly supported by a specific project of the Region of Sardinia and, then, by the international project Care-MeditFlora (funded by MAVA Foundation). Post-planting monitoring was carried out by the Regional Project "Biodiversity in Sardinia" to ensure successful adaptation and local establishment of the introduced species. A new project is currently ongoing to support the conservation of the Mediterranean biodiversity in Sardinia through active management actions (e.g., restocking, removal of alien species) and through the implementation of effective management strategies that will be representative of managing populations of conservation importance in the Mediterranean region.

The variability of the first-generation of Ribes sardoum, a threatened relic species, was studied through translocation measures in Sardinia, M. Porceddu, G. Porceddu, M. Porceddu, I. Bruni, G. Bacchetta - Plant Biodiversity. Content...

PDF] Seedling development and germination behaviour of Dimerocactus microphyllum subsp. tyrrhenicus

M. Porceddu, M. Porceddu, M. Porceddu, G. Bacchetta - Plant... This study has been partially supported by Care-MeditFlora project (funded by MAVA Foundation). Page 16. Accepted Article This article is protected by copyright...
Establishment of an online database (in project)
BALANCE SHEET

Sustainability (CARE) of the actions done

✓ Necessary a previous work more or less important with the administrations according to the regulations in force in the different countries.

✓ Partnerships with the local institutions, variable in number according to the islands and according to the structural organization of the territories.

✓ Actions mostly on public land: (78%).

✓ Partners:
  • managers: mostly public.
  • information and sensibilization of socio-professionals on the sites, but few partnerships with the private sector.

✓ On the other hand, common tools for disseminating information: BDD, conferences, publications,...
CONCLUSIONS

✓ **Target list** species defined with scientific criteria *(rarity, threats, endemism, protection status...)*.

✓ **60 in situ actions** done. BUT to evaluate them... we need monitoring for many years after the project to learn all the necessary lessons. **CARE-**

✓ The **choice of actions** depends on many factors:
  
  • Regulation,
  • status of land,
  • presence or absence of manager,
  • possibility of funding partners.

  All of these factors can introduce a bias in the choice of actions.

✓ **networks (STAKEHOLDERS) available** to **CARE** the *in situ & ex situ* actions done.
THANK YOU FOR YOUR ATTENTION

CARE MEDIFLORA
Conservation Actions for Threatened Mediterranean Island Flora: ex situ and in situ joint actions

Partners

Mediterranean Plant Specialist Group (IUCN/SSC)
Sóller Botanical Garden Foundation, Balearic Islands
Office of the Environment of Corsica - National Botanical Academy of Corsica
Hortus Botanicus Karalitanus, Sardinia
University of Catania, Sicily
Mediterranean Agronomic Institute of Chania, Crete
Agricultural Research Institute, Cyprus
Department of Forests, Cyprus