

**LIFE SEEDFORCE**

***Summary***

***titolo***

## **PROJECT DESCRIPTION**

### BACKGROUND

Monitoring and conserving habitats and species listed in the Annexes of the EU Habitats Directive (92/43/EEC) is a mandatory action for each Member State. Italy is home to a high number of vascular plants of Union interest (currently 104 taxa included in Annexes II, IV & V), making Italy the third Member State as per richness after Spain and Portugal. Annex II currently lists 84 species for Italy, mainly present in the Alpine and the Mediterranean biogeographical regions, with a high rate of endemism (over 60%). However, the last Art. 17 Report showed a negative trend for 58 Annex II species (69%) that have been reported with ‘Unfavourable’ conservation status, confirming the results of the latest IUCN assessments. The efforts undertaken in Italy over the last 20 years proved insufficient to grant to these taxa a ‘Favourable’ conservation status. Extinction risks for endemic plants include human-induced habitat modifications, especially the abandonment of traditional agricultural/land-use practices (e.g. discontinued coppicing and haymaking) and overgrazing, and also the spread of invasive alien species and high-impact recreational activities and tourism. Intrinsic factors also have a significant role to play for species that are naturally scarce and distributed in a limited number of small, fragmented populations. Significant efforts are still necessary to achieve the Habitats Directive targets in terms of long-term plant conservation.

### OBJECTIVES

The main goal of the LIFE SEEDFORCE project is to improve the conservation status of 29 EU Habitats Directive Annex II species with an ‘Unfavourable-Inadequate’ (19) or ‘Unfavourable-Bad’ (10) conservation status, according to the Art. 17 reporting.  An integrated ex situ/in situ approach will be undertaken to remove the threats that these 29 species are facing, aiming at improving the quality of both habitats and populations in 76 Natura 2000 network sites (SCI/SACs) where these species grow or have recently disappeared.

**The 29 project target species are:**

\*Astragalus verrucosus

\*Bassia saxicola

\*Campanula sabatia

\*Cytisus aeolicus

\*Galium litorale

\*Limonium strictissimum

\*Linum muelleri

\*Ribes sardoum

\*Silene hicesiae

Adenophora liliifolia

Botrychium simplex

Centranthus amazonum

Crepis pusilla

Dracocephalum austriacum

Elatine gussonei

Eleocharis carniolica

Eryngium alpinum

Gentiana ligustica

Gladiolus palustris

Himantoglossum adriaticum

Kosteletzkya pentacarpos

Leucojum nicaeensis

Linaria flava

Linaria pseudolaxiflora

Liparis loeselii

Marsilea quadrifolia

Primula palinuri

Saxifraga tombeanensis

Woodwardia radicans.

Regarding habitat-related impacts, LIFE SEEDFORCE aims to mitigate and/or remove threats by:

* Controlling re-vegetation, removing shrubs and trees, and cutting grass;
* Protecting the sites from overgrazing and trampling with relevant fencing;
* Eradicating invasive alien species according to the currently accepted best practices.

For intrinsic threats related to small and fragmented populations, the project team will increase population size with a carefully selected genotype mix that will mimic natural gene flow (usually blocked by isolation), reducing plant isolation and  habitat fragmentation. The project team will also manage each site to sustain a viable population of the target species, increasing the number of individuals and removing threats. This will give each target species better resilience to future challenges, ultimately improving their conservation status.

The project’s objectives are in line with the EU Habitats Directive, the 2030 Biodiversity Strategy, EU Regulation 1143/2014 on Invasive Alien Species, Farm to Fork Strategy, the new Common Agricultural Policy (CAP), and the EU Pollinators initiative.

### **RESULTS**

Expected results:

* Improved conservation status of habitats in the 76 Natura 2000 sites (SCI/SACs) selected, covering 450,250 ha, ensuring that each site can support a viable population of the target species, by means of fencing, cutting grass, removing shrubs and trees, eradicating alien invasive species, as appropriate, adopting international standards;
* Collection of target species germplasm, without affecting the natural reproductive potential of the donor population, and its storage for long-term conservation;
* Propagation of target species, producing at least 50 000 individuals, making use of the facilities at each partner's site, including seed germination labs and nurseries;
* (Re)introduce/reinforce 139 populations of the 29 target species, in the target 76 Natura 2000 sites;
* Monitor and maintain in each Natura 2000 site optimal conditions for the survival of the translocated materials in partnership with the managing authorities;
* Deliver, in partnership with ISPRA (technical services of the Ministry of the Ecological Transition), guidelines and training for the management of each Natura 2000 site, to grant favourable conditions for the long-term survival of each target species; and
* Develop long-term agreements with the managing authorities of the 76 SCI/SACs, to guarantee the long-term survival of each target species.

## BENEFICIARIES

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| MuSe - Museo delle Scienze, Italy | Participant |
| UNIUD (Università di Udine), Italy | Participant |
| UNIPD (Centro di Ateneo Orto Botanico dell'Università di Padova), Italy | Participant |
| PNM (Ente Parco Nazionale della Maiella), Italy | Participant |
| UNICT (Università degli Studi di Catania), Italy | Participant |
| BGR-DEB (Dipartimento di Biologia Ambientale - Sapienza Università di Roma), Italy | Participant |
| UNICA (Università degli Studi di Cagliari), Italy | Participant |
| CFA-LSB (Parco Monte Barro), Italy | Participant |
| UNIGE (Università degli Studi di Genova), Italy | Participant |
| UNIPA (Università degli Studi di Palermo), Italy | Participant |
| UNITUS (Università degli Studi della Tuscia –  Dipartimento dei Scienze Ecologiche e Biologiche), Italy | Participant |
| LEGAMB (Legambiente APS Onlus), Italy | Participant |
| UM (Universita' ta' Malta), Malta | Participant |
| UL-BF(University of Ljubljana, Biotechnical faculty, Botanic garden), Slovenia  CBNMed (Conservatoire botanique national méditerranéen de Porquerolles), France | Participant |
|  | Coordinator |