



Università
Ca'Foscari
Venezia

PROJECT ACRONYM AND TITLE: REDUNE- Restoration of dune habitats in Natura 2000 sites of the Veneto coast

FUNDING PROGRAMME: LIFE

CALL: LIFE NATURE AND BIODIVERSITY 2016

SCIENTIFIC FIELD: Environmental technology and green economy

HOST DEPARTMENT/CENTRE: Department of Environmental Sciences, Informatics and Statistics

SCIENTIFIC RESPONSIBLE: Gabriella Buffa

FINANCIAL DATA:

Project total costs	Overall funding assigned to UNIVE
€ 1.203.230,00	€ 217.036,00

ABSTRACT:

Despite their valuable attributes for both human society and nature, dune ecosystems share a history of exploitation and mismanagement. Environmental problems associated with coastal misuse include loss of natural habitats and loss of the natural pattern of landscape, alien species spread, threats to native species, and decreased resilience of plant communities. Tourism is nowadays considered one of the principal cause of degradation. Intense tourism pressure coupled with a general lack of ecological consciousness of the value of these ecosystems may compromise not only the natural value and the ecological functionality of these systems, but also the quality of the recreational experience itself, raising the issues of environmental management and sustainable use. In light of this, the general purpose of this project is to re-establish and maintain over time the ecological integrity of habitats 2110|2L20, 2130*, 2250* e 227 0+ and of *Stipa veneta** populations, as a means to guarantee the ecological functioning of the entire coastal dune mosaic, in 4 Natura 2000 sites of the North Adriatic coastline, making use of an ecosystem approach that considers all ecosystem components (e.g. human activities, habitats and species, and physical processes) and applies well developed methods. In detail the project aims to:

1. Restore 91ha of 5 habitats of EU importance and double the world wide number of individuals of the priority species *Stipa veneta**;
2. Reduce negative human impacts inside the Natura 2000 sites;
3. Get stakeholders to develop a responsible behavior towards sand dune ecosystems and support a sustainable use;
4. Transfer and replicate acquired expertise and methods to similar ecosystems within the Mediterranean context.

The improvement of the Natura 2000 sites' ecological integrity will be achieved through a) restoration activities and habitat management; b) shared conservation and development strategies; c) increased

public awareness d) monitoring of the effectiveness of restoration and conservation measures. The project will make the best use of results from previous projects and studies on the same habitats at Mediterranean level, as specified in 83 form. The proposal implements the provisions for the protection and management of the N2000 sites included in the Prioritized Action Framework, approved in 2015. The restoration of the natural zonation will be achieved through the restoration and replacement of 92,000 mq of mobile dunes, using naturalistic engineering techniques, and the management, restoration and/or expansion of about 823,000 mq of transition and fixed dune habitats. The process of habitats' recover will be favored using plantings of 151,000 ind. of native species (including 1,000 ind. of *Stipa veneta**), which will ameliorate environmental extremes and facilitate the establishment of other species. An action against the IAS *Oenothera stucchii* will be implemented. These actions will contribute to enhance both habitats' conservation status and the overall biodiversity by enhancing habitat for habitat-specific plant species. 985 m of boardwalks directing access to beach and 9,300 m of fences to delimit no-entry areas will be used to favor habitats' natural dynamics and recover, and to control negative human interference. An assessment on the ecosystem functions restoration will be provided. Concrete actions will be preceded by a sound technical blueprint. Much effort will be devoted to communication and replication. Besides traditional actions (e.g. activities with citizens; meetings; web site) training aimed at increasing the awareness on the value of the habitats and a formal agreement to protect them will be implemented to get stakeholders to develop a responsible behavior toward sand dune ecosystems and their conservation and to help them to appraise and bet on a new paradigm for tourism. Replicability will be ensured by 3 journeys to export and share methods and the provision of 3 English/ Italian bilingual guidelines on some challenging issues. A coordination committee will monitor the project throughout its duration to evaluate its efficacy, and possibly suggest improving changes, making the most suitable use of the EU funding.

Planned Start date	Planned End date
September 1th, 2017	March 31th, 2022

PARTNERSHIP:

1 Università Ca' Foscari Venezia	Venice (IT)	Coordinator
2 EPC- European Project Consulting s.r.l. unipersonale	IT	Partner
3 Regione del Veneto- Struttura di progetto Strategia Regionale della Biodiversità e dei Parchi	IT	Partner
4 SELC Società Cooperativa	IT	Partner
5 Agenzia veneta per l'innovazione nel settore primario già Veneto Agricoltura	IT	Partner
		Partner