LIFE PRIMED project

To recover the forest ecosystem, we will implement a plant nursery and silviculture techniques. We will also reinforce the populations of keystone plant species with ex-situ propagation and conservation actions. To increase the resilience of the ecosystems, we will also apply innovative hydraulic engineering solutions and develop self-sustainable water and forest management practices. Local residents will also be engaged in conservation and valorisation actions to ensure long-term duration of the project.

The project is co-implemented by **2 countries: Italy and Greece** which share the same environments and facing similar challenges.

For a successful long-term conservation of the project sites, **key stakeholders will be involved** in the process, especially **local residents** and **technical-scientific community.**

Project areas

Actions will be implemented in the Natura 2000 sites of "Wood of Palo Laziale" (IT6030022), Lazio (Italy) and "Delta Nestou" (GR1150010), located in Anatoliki Makedonia, Thraki (Greece).









Hellenic society for the Protection of Nature (Greece) - **NGO**



Department of Environmental Biology of Sapienza University of Rome (Italy) - **University**



Department of Civil, Constructional and Environmental Engineering of Sapienza University of Rome (Italy) - **University**



ARISAL Agenzia Regionale per lo Sviluppo e L'innovazione dell Agricoltura del Lazio (Italy) **Public Institution**



Hellenic Agricultural Organization "Demeter" (Greece) **Public Institution**





Mediterranean treasures under threat

The Palo Laziale forest, located at the seafront 40 km from Rome, is one of the last remaining examples of an ancient floodplain forest than in the past stretched over the entire coastline of the central-western Italy. In Eastern Macedonia and Thrace (Greece), the largest Mediterranean riparian forest is protected by the National Park of Nestos Delta. The forest ecosystem is of great naturalistic value, but in past decades it has been severely reduced in size. In both these Natura 2000 sites, habitats, plant and animal species face serious threats, with increased drought due to climate change, inefficient forest and water management, shrub expansion, and invasive alien species.

Mediterranean coastal forests and freshwater habitats are among the most threatened ecosystems of Europe.

> First sign of forest dieback in Palo Laziale 1995





Forest dieback

Increasing aridity and the number of extreme drought events that are affecting the Mediterranean area in the last decades has induced a dramatic forest dieback in Palo Laziale. The first signs were observed in 1995 and have progressively increased until the severe summer of 2003. Approximately 40% of tree individuals were found to be dead, also as a consequence of the concurrent attack of the fungus Biscogniauxia mediterranea in pathogenic stage.

Located in an area that has seen the neighbouring urban areas that have grown unrelentingly, the wood of Palo Laziale is a symbol of the resistance against land consumption and degradation.

> 40% of tree dying in Palo Laziale 2003





Current situation

In 2008 the owners entrusted the Department of Environmental Biology of the Sapienza University of Rome to identify the primary causes that have led to the current decline. From this multidisciplinary study, published in 2014, a set of environmental solutions needed for the ecological restoration of the site have been originated. With the approval of LIFE PRIMED (LIFE17 NAT/GR/000511) such solutions are coming true.

Innovative restoration solutions will ensure the environmental recovery of the site.

> Current situation 2018







