

PROJECT ACTIONS

Impact assessment on the habitat type “(Sub-) Mediterranean pine forests with endemic black pines”

The impact assessment of forest fire on the priority habitat type “(Sub-) Mediterranean pine forests with endemic black pines” on Mount Parnonas is based on the detailed mapping of the burnt areas and on the evaluation of the fire impacts through the use of remote sensing, geographical information systems and fieldwork.



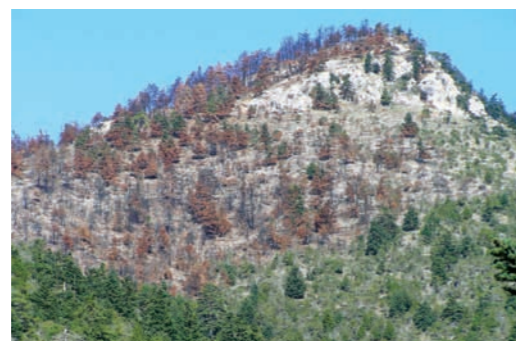
Demonstration of a structured approach for the restoration of black pine forests

This action involves the development and demonstration of a structured approach for the restoration of black pine forests, which will contribute to setting priorities for the restoration process of the burnt areas.

Central point to this approach is the description of a step-by-step process for the prioritization and selection of the most suitable areas for restoration. This is achieved through the implementation of exclusion criteria (i.e. areas with potential for natural regeneration), eligibility criteria in respect to abiotic parameters (i.e. soil depth, slope etc.) and technical criteria (i.e. accessibility). The above mentioned approach will be further elaborated during the restoration process of black pine forests on Parnonas.

Implementation of restoration measures

This action refers to the restoration of 290 hectares of black pine forest on Mount Parnonas by the Forestry Service of Sparta. The technical restoration study that precedes the restoration action takes into consideration the suggestions of the structured approach for Parnonas and specifies all the necessary technical and financial requirements for the smooth and timely implementation of the restoration works.



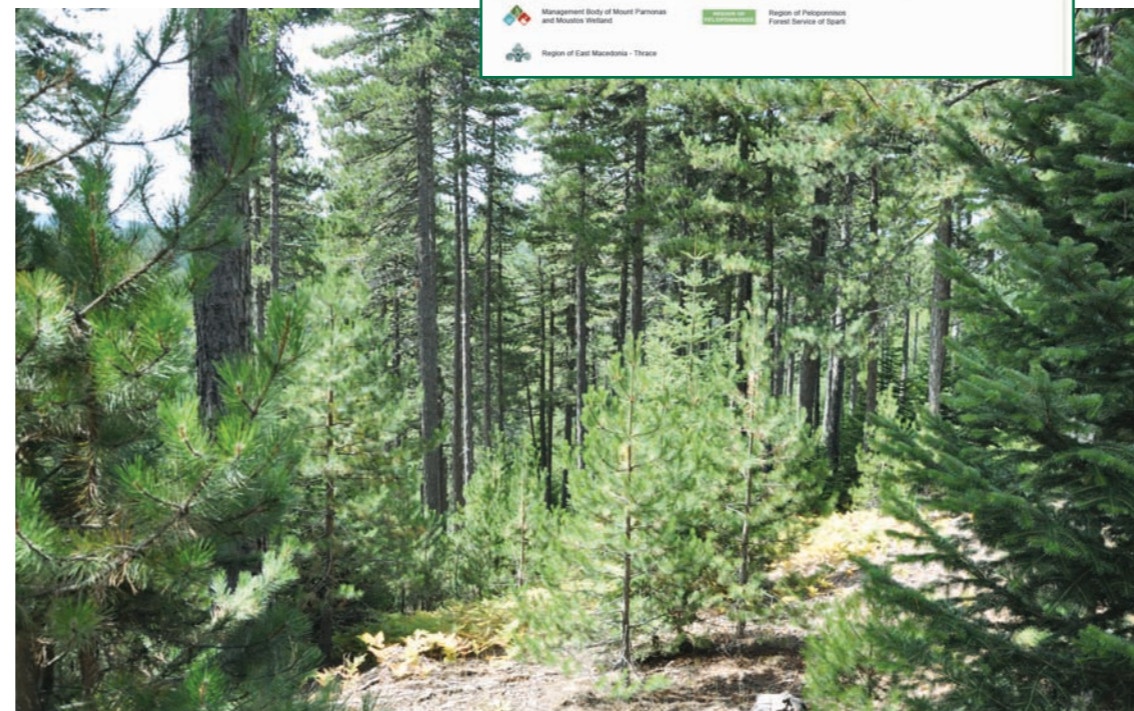
Monitoring and evaluation of the restoration

A critical point to all restoration projects, especially when they target habitat types of Community interest and are designed within Natura 2000 sites, is the installation of a monitoring system for the evaluation of restoration effectiveness. On Parnonas mountain, permanent plots will be installed and data will be collected on a regular basis.



Dissemination and communication actions

Dissemination and communication activities of the project's results (i.e. webpage, participation in conferences, layman's report) aim to promote the structured approach followed and the restoration actions implemented. Special emphasis is given to the organization of a conference concerning forest restoration, the publication of guidelines on the implementation of a structured approach for the restoration of black pine forests and their circulation to competent authorities on forest restoration.



The priority habitat type “(Sub-) Mediterranean pine forests with endemic black pines”

The priority habitat type “(Sub-) Mediterranean pine forests with endemic black pines”, which is included in Annex I of the Directive 92/43/EEC, is formed by black pine forests with four subspecies and has a fragmented distribution around the Mediterranean Region but also occurs in Crimea, Ukraine.



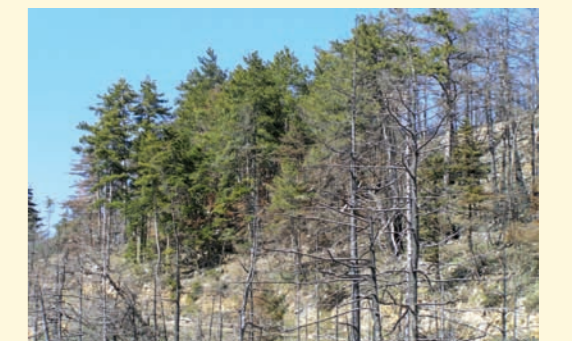
Distribution of the black pine according to the European Forest Genetic Resources Programme.

The black pine (*Pinus nigra* Arn.) is a frugal species, resistant to drought. For this reason it often appears in areas previously abandoned by stock farming and agriculture. The species forms extensive forests and, when managed in a sustainable manner, produces valuable timber. In Greece, black pine forests have been included in Sites of Community Importance of the Natura 2000 network, since they form a priority habitat type.



Black pine forests and forest fires

Black pine is moderately adapted to forest fires. Due to the dry outer bark formed at the trunk's base, the species is adapted to understory fires which destroy the fungus layer within the pine straw, thus helping the regeneration of black pine. On the other hand, large crown fires destroy the cones and sperms that have not reached ripeness, so the forest cannot regenerate in a natural way. Natural regeneration occurs in cases where patches of surviving trees are maintained, which could gradually act as seed providers, a process that can take a long time.



PROJECT OBJECTIVES

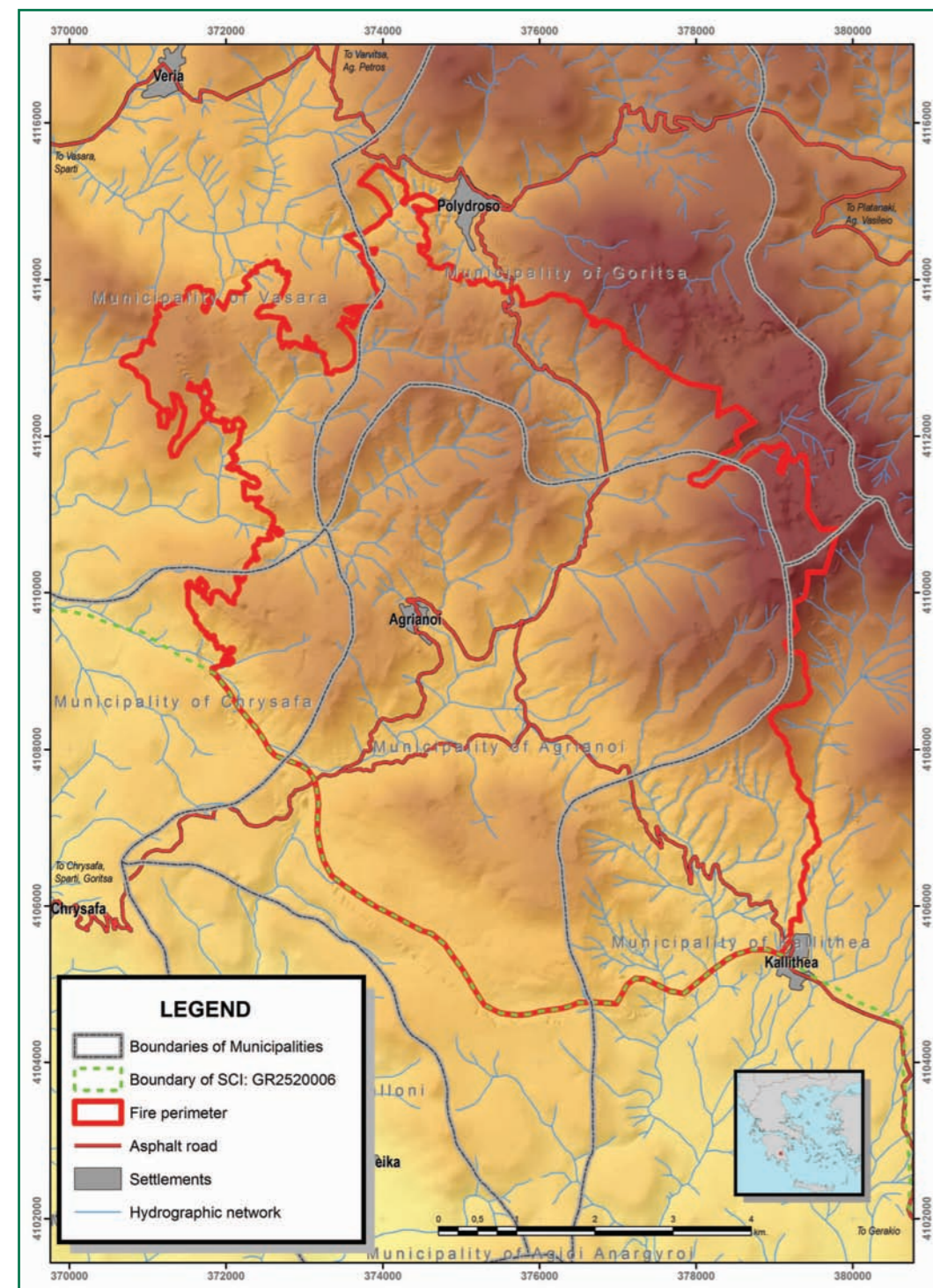
Black pine forests* in the Site of Community Importance GR 2520006 "Oros Parnonas (kai periochi Malevis)" of the Natura 2000 network have been severely damaged by extensive forest fires in 2007.

The LIFE+ project "Restoration of *Pinus nigra* forests on Mount Parnonas (GR 2520006) through a structured approach" aims at:

- A. The demonstration of the application of a structured approach to restore burnt areas of the priority habitat type 9530 "(Sub-) Mediterranean pine forests with endemic black pines".
- B. The restoration of 290 hectares of the priority habitat type "(Sub-) Mediterranean pine forests with endemic black pines" in the Site of Community Importance GR 2520006 "Oros Parnonas (kai periochi Malevis)".

* They form the priority habitat type 9530 "(Sub-) Mediterranean pine forests with endemic black pines".

Burnt area within the Site of Community Importance



Since January 2009, the Greek Biotope - Wetland Centre (EKBY) in collaboration with the Region of Peloponnisos, the Region of East Macedonia - Thrace and the Management Body of Mount Parnonas and Moustos Wetland are implementing the LIFE+ project "Restoration of *Pinus nigra* forests on Mount Parnonas (GR 2520006) through a structured approach" LIFE07 NAT/GR/000286. The project is co-financed by the General Directorate for the Development and Protection of Forests and Natural Environment - Ministry for the Environment, Energy and Climate Change and its duration is 4,5 years.



PROJECT:
LIFE07 NAT/GR/00286



"Restoration of *Pinus nigra* forests on Mount Parnonas (GR 2520006) through a structured approach"

IMPLEMENTATION SCHEME

Beneficiary:



THE GOULANDRIS NATURAL HISTORY MUSEUM
GREEK BIOTOPE/WETLAND CENTRE

Partners:

REGION OF
PELOPONNISOS
FOREST SERVICE OF SPARTI



REGION OF EAST
MACEDONIA - THRACE

Co Financing



GENERAL DIRECTORATE FOR THE DEVELOPMENT
AND PROTECTION OF FOREST AND NATURAL ENVIRONMENT

Budget: 3.035.791 €

Duration: 1/1/2009 - 30/6/2013

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