









### "Strategic Environmental Management in Mount Athos under Climate Change" - LIFE STEMMA ATHOS (LIFE19 CCA/GR/001185)

LIFE Platform Meeting on Forest Restoration in Europe,

3-5 JUNE, BRASOV ROMANIA









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#### PROJECT LOCATIONS:

Mount Athos (Greece)

Le Valat de Solan (France)

**BUDGET:** 

Total amount: 5,713,188 €

EC cofounding rate: 55%

**DURATION:** 

01/10/20 - 31/12/25



#### **PROJECT BENEFICIARIES:**

Coordinating Beneficiary:

Holy Community of Mount Athos (GR)

Associated Beneficiaries:

Democritus University of Thrace (GR)

Monastère de Solan (FR)

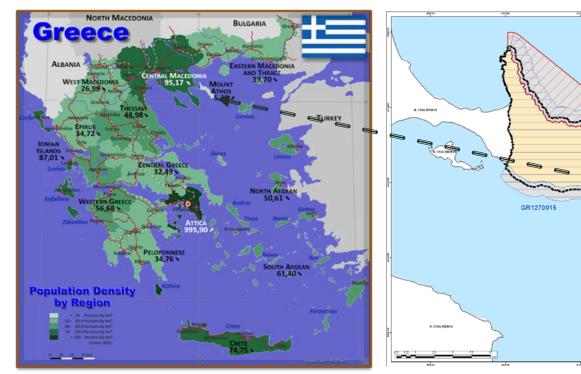
Les Amis de Solan (FR)



#### Site Location

ninsula

Mount Athos (Agion Oros in Greek) occupies the peninsula "Athos" neighboring to the Prefecture of Chalkidiki, Central Macedonia Region, Greece





#### Site Description & Demography





Total area: 33,400ha

<u>Topography</u>: Mountainous –

semi-mountainous

Altitudes: 0 - 2,033m

Forest cover: > 93.1%

Seashore: 179km

Population: 2021 1746 (-3.6%)

2011 1811

Pop. Density: 5.3/ sq.km.

<u>Ter. Division</u>: 20 Monasteries

16 Scetes

Numerus Cells &

Huts

#### Restrictions and Bans with Environmental Dimension





- Access only by boat
- Access to vessels 500m from the seashore
- Professional fishing 500m from the seashore
- Hunting activities in general
- Husbandry activities in general
- Asphalt paving roads construction
- Construction of roads in the lower part of the peninsula

#### Administrative System



#### Byzantine period

- 961 Megistis Lavras Monastery Foundation
- 972 A' Typikon Emperor Ioannis Tsimiskis



#### Ottoman period

• 1593 1st Great Summit of the Holy Community



#### **Greek period**

1926 Mount Athos Constitutional Law



#### Administrative System



- The Holy Community is the Legislative Body of Mount Athos
- 20 monks as Representatives appointed by the monasteries gather in the Community premises in Karyes twice a week (Parliament)
- Decision making of special issues and Regulative acts approval (Laws) 2 times a year in summits of the 20 Representatives (Parliament) + 20 manasteries' Abbots (Senate)
- Regulative acts are the Holy Community decisions ratified by the Ministry of Foreign Affairs & published in the Government's Gazette



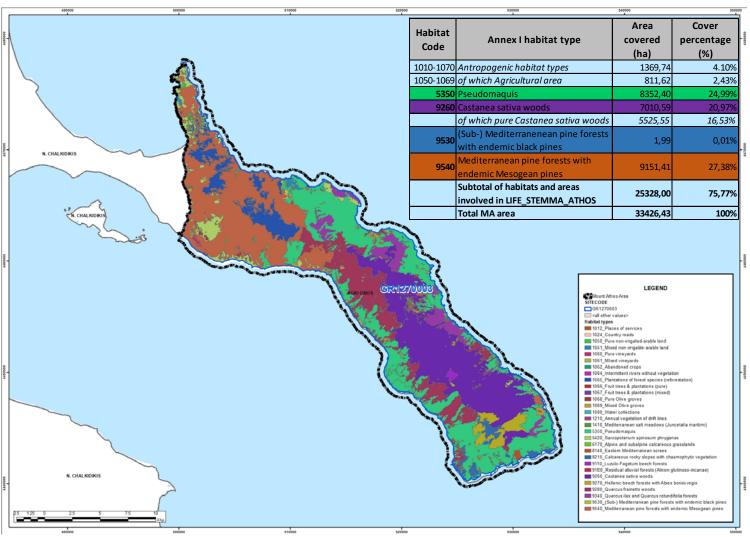
#### Milestones in environmental protection status



- 1948 Regulative act on agro-security
- 1953 Regulative act on forest management
- 1983 Regulative act on vehicles entrance & forest roads construction
- 1987 Regulation of Ierissos Port (limiting fishing boats & vessels access in MA)
- 1988 Inscription as UNESCO World Heritage Monument
- 1995 Regulative act on forest management (amends 1953 Regulation).
- 1996 Regulative act on hunting prohibition
- 1999 HCMA accepts the invitation to participate in Natura 2000 network
- 2007 Drafting of the 1<sup>st</sup> Special Environmental Study
- 2017 Establishment of 2 marine N2000 areas for the birds and sea fauna
- 2019 Drafting of the 1st Priority Action Framework for Mount Athos N2000 area
- 2021 Drafting of the 2<sup>nd</sup> Special Environmental Study (on going)

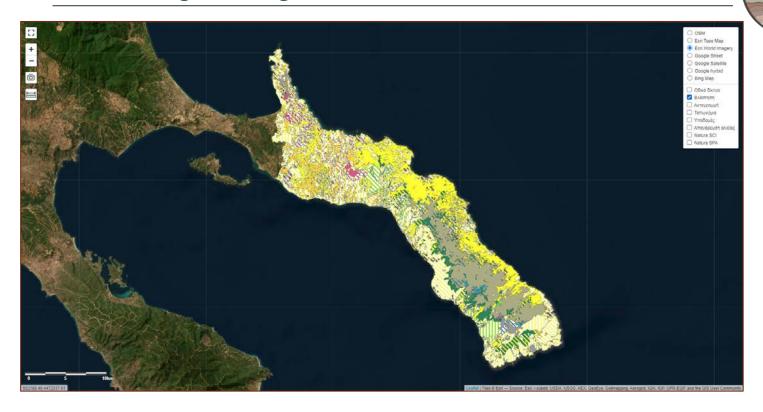
#### Habitats in GR1270003 Natura 2000





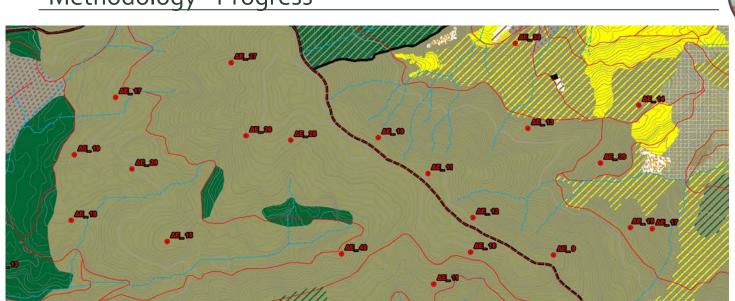
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#### A.1. Strategic Management Plan for Mount Athos



- Collection of the existing environmental datasets for the 20 monastic areas and compilation in a single digital database
- Creating a baseline for CO<sub>2</sub> sequestration for biomass
- Assist the administration in keeping UpToDate environmental data and facilitating the decision-making system in Mount Athos

#### A.1. Strategic Management Plan for Mount Athos Methodology - Progress



#### **Vegetation Layer Analysis by Polygon**

Polygons created: 3,674 Forest stands digitized: 891

Biomass points: 744 Minimum area (m²): 7.8

Average area (ha): 9.12 Maximum area (ha): 3,639

#### A.1. Strategic Management Plan for Mount Athos Protection of landscape, preservation of monumental trees





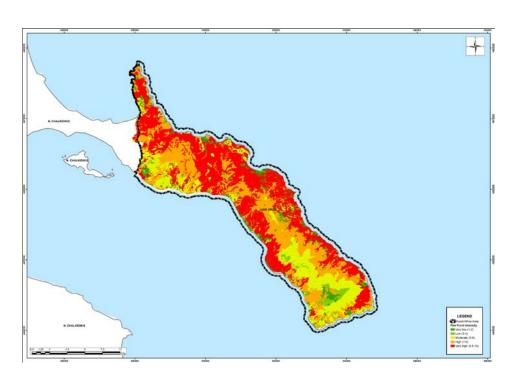




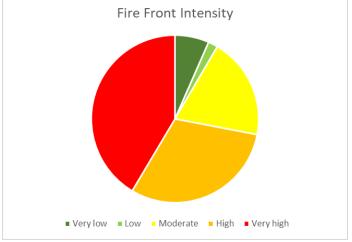
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#### A.1. Strategic Management Plan for Mount Athos Collateral outcomes





Fire Front Intensity		Area (m²)	Percent	
Very low	1	8.648.635,10	2,58%	6,58%
	2	13.432.212,25	4,01%	
Low	3	6.211.608,19	1,85%	1,85%
	4	2.303,50	0,00%	
Moderate	5	31.840.765,71	9,49%	19,58%
	6	33.815.367,28	10,08%	
High	7	76.971.360,44	22,95%	30,54%
	8	25.428.135,15	7,58%	
Very high	8,5	112.207.343,46	33,46%	
	9	66.566,01	0,02%	41,45%
	10	26.719.816,40	7,97%	



### C1: Management of chestnut (Castanea sativa) habitats







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### C1: Management of chestnut (Castanea sativa) habitats









# C.2: Enrichment of pure chestnut (*Castanea sativa*) and oaks (*Quercus spp.*) stands









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## C.3: Management of aleppo pine (*Pinus halepensis*) habitats









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### C4 Management of black pine (*Pinus nigra*) habitats

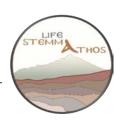






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#### C<sub>5</sub>: Management of areas with pseudomaquis shrub vegetation







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### C6: Development of sustainable agroforestry systems



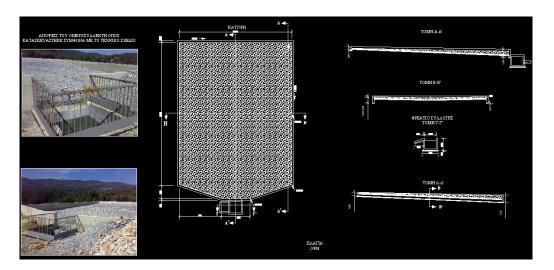




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# C7 Development of innovative rainwater harvesting systems for multiple uses



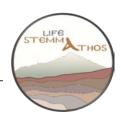






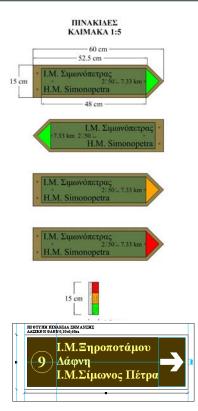
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### C.8 Development of a common signing system for wildfire protection infrastructure





Road type	Length (m)	Percent (%)
Main Fire Protection Road	52 178.7	3.83%
Main Monastery Connection		
Road	122 825.9	9.01%
Secondary Road	222 251.3	16.31%
Tertiary Road	768 792.4	56.41%
Pathway	196 890.2	14.45%
Total	1 362 938.4	100.00%



The entire road network of Mount Athos, including the pathways, has been digitized and integrated into the A1 action map

### C.9 Development of fuel and carbon stock models









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# C.10 Development of a strategy for the dissemination of the projects' outputs







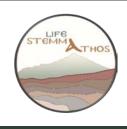












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