



**LIFE SAVING BUSKETT**

Soil stabilisation measures to protect Annex I habitats in Buskett-Girgenti Natura 2000 site - LIFE12 NAT/MT/000182



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**Soil stabilisation measures to protect  
Annex I habitats in Buskett-Girgenti  
Natura 2000 site**

LIFE12 NAT/MT/000180

**8<sup>th</sup> May 2017**

**Dr. Mark Causon (Life+ Project Manager)**



LIFE+ - Soil stabilisation measures to protect Annex I habitats in Buskett  
Girgenti - Natura 2000 site  
01/07/2015 - 31/06/2018  
This project is part-financed by the European Union through the LIFE+ financial  
instrument Co-financing ratio: 85% EU Funds; 15% National Funds





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A Brief Description of

## LIFE SAVING BUSKETT – Project

By Dr Mark Causon



**Soil stabilisation measures to protect Annex I habitats in Buskett-Girgenti Natura 2000 site**



LIFE - Soil stabilisation measures to protect Annex I habitats in Buskett  
Girgenti - Natura 2000 site  
01/07/2010 - 31/05/2018  
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## C. Concrete conservation actions.

**C1.** Repair/restoration/rebuilding of retaining walls, arched buttresses and stone slabs along watercourse supporting Annex I habitats.

Completed Volume 547.38m<sup>3</sup> and 178 of walls

Completed 49 arches

**C2.** Introduction of soil stabilisation measures including repair/restoration/rebuilding of retaining walls (not included in Action C1) supporting Annex I habitats along watercourse and on valley sides.

Completed Volume 16,432m<sup>3</sup> corresponding to a

Length 5,014m

73% total project

86 Completed walls





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**C3.** Selective removal of silt and boulders from parts of the watercourse.

100% completed

**C4.** Removal of invasive alien species.

Approximate removal of an area of 24,250 m<sup>2</sup>

**C5.** Seed collection and planting of saplings of characteristic trees.

2,340 trees planted



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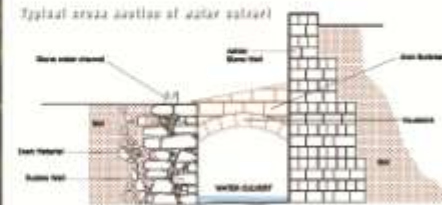
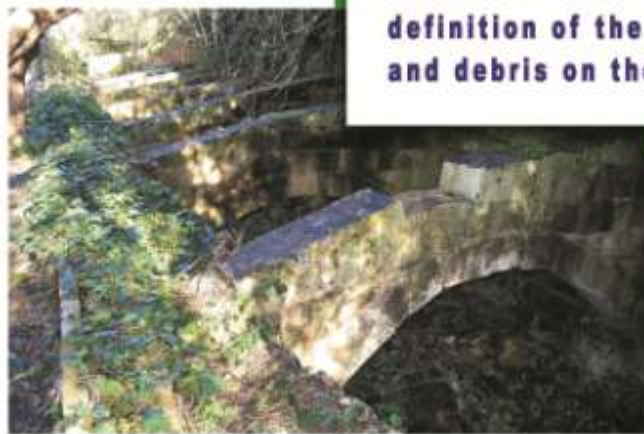


The retaining walls and arched buttresses along the watercourse will be repaired, restored and/or rebuilt. Such soil stabilisation measure, apart from consolidating the definition of the watercourse itself will reduce the deposition and sedimentation of soil and debris on the watercourse coming down from the valley sides.

## Action C1:

**554 m<sup>3</sup>** along a stretch of 176 metres of dry stone ashlar wall along the watercourse will be repaired/restored or rebuilt. Another **317m<sup>3</sup>** (176 metres) of the flanking stone rubble wall along the watercourse will be rebuilt.

A total of 49 Arched Buttresses along the watercourse that collapsed or are in danger of collapsing, will be rebuilt. In this way, a total of 15,600m<sup>2</sup> of two important natural habitats will be safeguarded from the danger posed by the current



## Action C1



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## Action C2:

**17,149 m<sup>3</sup>** in volume along stretches of 6,297m in length of **dry stone rubble walls** along the watercourse and further up the valley sides will be repaired/restored and/or rebuilt.

**4,499 m<sup>3</sup>** in volume along stretches of 1,020 metres in length of **masonry ashlar walls** along the watercourse and higher up the valley sides will be repaired / restored and/or rebuilt.

Geotextile material , mulches and dead wood are placed over an area of 15,000m<sup>2</sup>. This action will safeguard natural habitat areas from the dangers posed by the current state of the walls and the consequent soil instability.



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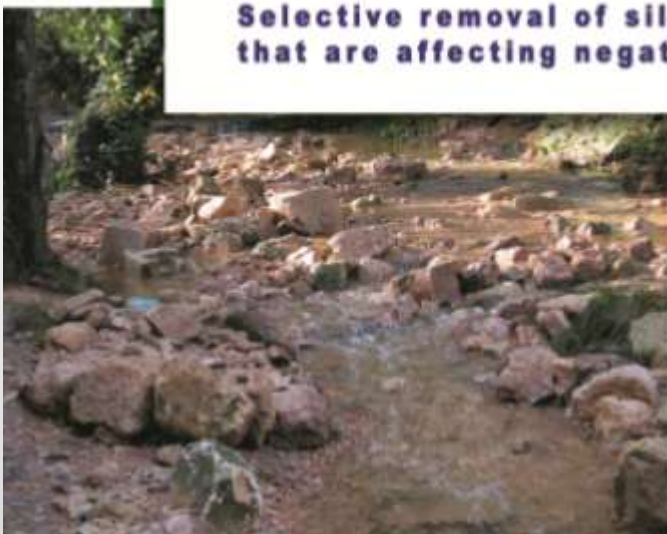


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Selective removal of silt and boulders from parts of the watercourse that are affecting negatively the targeted habitats.



**Action C3**

## Action C3

Selective removal of silt and boulders currently harming targeted habitats along the watercourse will be carefully removed.

From this action will directly benefit clusters of *Populus alba*, *Fraxinus angustifloia* and *Ulmus canescens* trees growing at the lower end of the watercourse.

Such trees need protection from deposition and accumulation of silt and debris in the watercourse so that these indigenous trees can grow into a mature *Populus alba* gallery.



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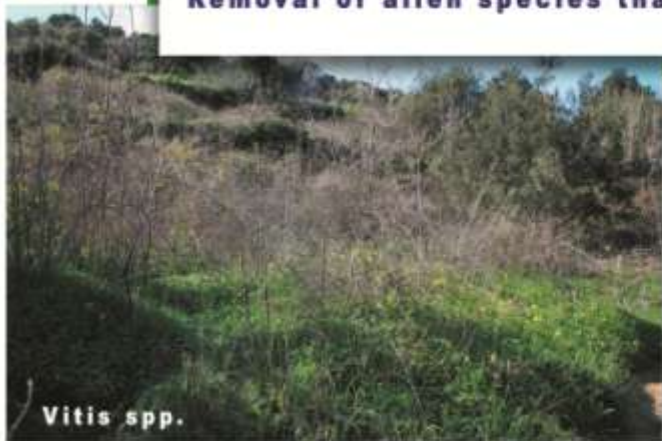


Agave spp.



Ailanthus altissima

Removal of alien species that are competing with native species



Vitis spp.



## Action C4

## Action C4

Alien invasive species that are competing with native species will be removed completely from the whole area targeted by the project (**Totalling to 241,742m<sup>2</sup>**)

Species will mainly include;

1. *Ailanthus altissima*.
2. *Agave spp.*
3. *Vitis spp.*
4. *Ricinus communis*.
5. *Arundo donax*.
6. *Opuntia ficus indica*.







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## Action C5

**3,300** Trees that are specific of the targeted habitats will be planted.

*These include;*  
*Populus alba,*  
*Ulmus canescens,*  
*Fraxinus angustifolia,*  
*Salix alba and Salix*  
*pedicellata, Ceratonia*  
*siliqua, Olea europaea,*  
*Laurus nobilis, Pistacia*  
*lentiscus and Rubus*  
*ulmifolius*



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15 out of 30 newspapers  
articles published  
11 out of 20 TV slots  
participated

Total visitors reached **11501**





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**IL-BUSKETT**

**WOODLAND GARDEN**

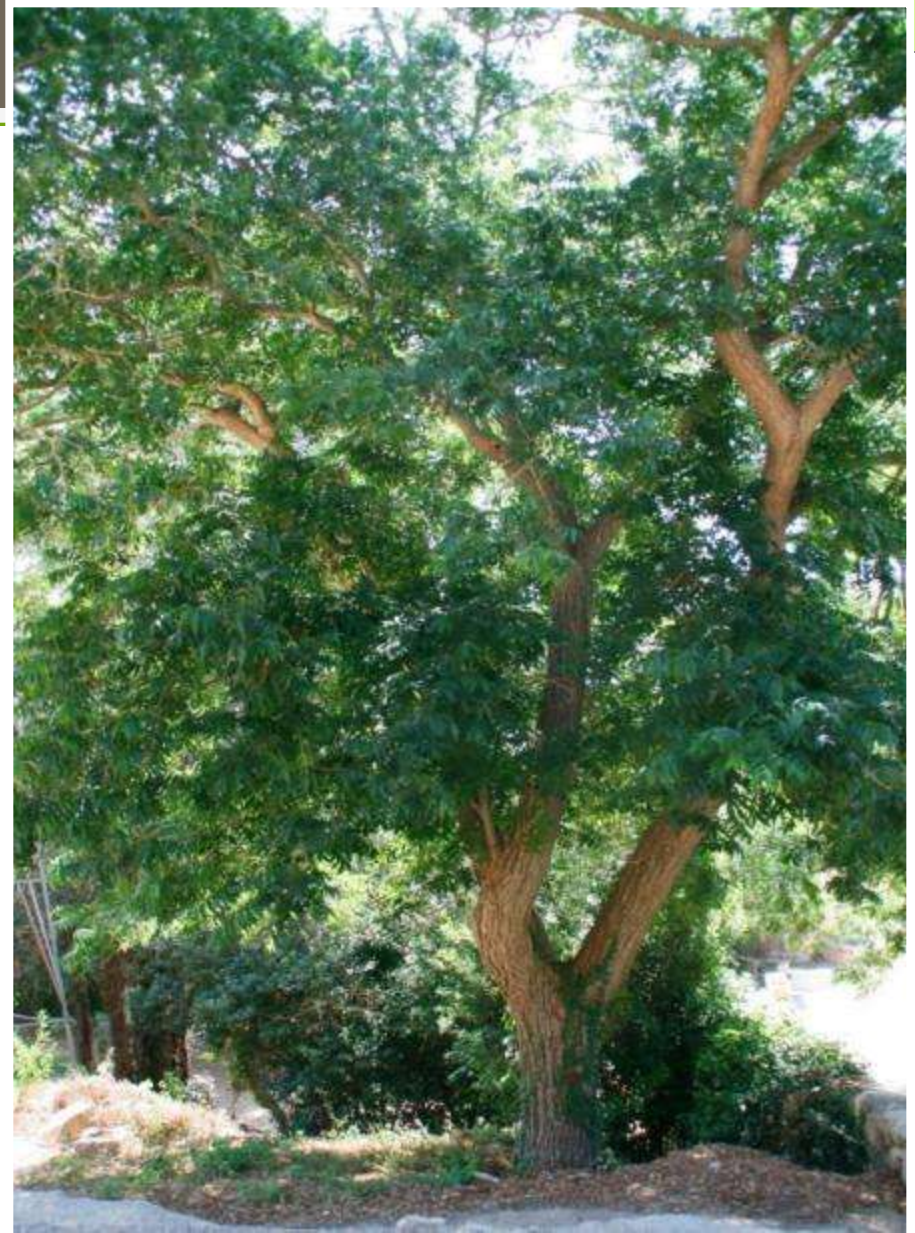


MAR 20





**Baroque style layout**, with passage and paved horse drawn carriage ways. 'Orangeries' or Citrus tree groves and artificial lakes



***Fraxinus angustifolia*** -Wild narrow-leaved Ash – Sagra tal-Fraxnu.



Scallop fungus-Arzella ta' L-Art





Bear's Breeches –Hannewija



Italian Lords and Ladies-Garni

## Avifaunal species

The site ideal for bird observation, particularly migrating birds of prey:

*Pernis aviforus* – Honey Buzzard – Kuccarda

*Circus aeruginosus* – Marsh Harrier – Baghdan ahmar

*Falco peregrinus* – Peregrine – Bies





**Painted frog - Zring**



***Ulmus minor*-English Elm-  
Nemmiesa/Ulmu**

**Deciduos fast growing large tree  
asociated with watercourses**

**Leaves dark greenalmost  
orbicular.**

**The wind pollinated reddish  
purple hermaphrodite flowers are  
without petals**



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**Thank you for your attention.**

**Dr Mark Causon Project Manager**



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