

Protect biodiversity in the Garrigues of the Gard





Garrigues of the Gard: bountiful yet vulnerable



The territory of the Garrigues of the Gard that extends from the Gorges du Gardon to the Gorges de la Cèze perfectly embodies the diversity of Mediterranean landscapes. These spaces are created through the different uses made of them by people in the area.

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Some 80% of habitats and 51% of species of Community interest are threatened in the Mediterranean region, which nonetheless represents a global biodiversity hotspot. The area brings together more plant species than all of the other European regions combined.

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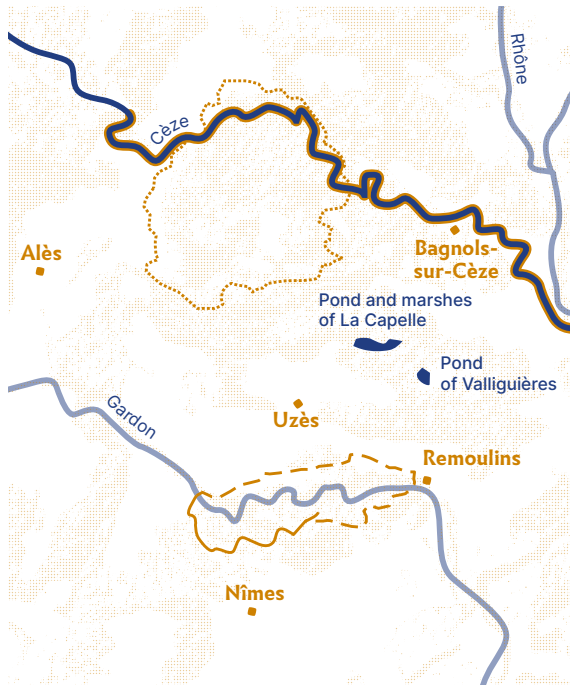
Natura 2000: what is it?

The Natura 2000 network aims to preserve the ecological diversity of the European Union. Natura 2000 brings together natural and semi-natural sites with major heritage value based on the remarkable, rare or threatened flora and fauna that reside there. The designation of a Natura 2000 site depends upon the implementation of two European Directives: “The Birds Directive” (BD) and/or “The Habitats, fauna and flora Directive” (HD).

To preserve the animal and plant species considered to be “of Community interest” along with their habitats, actions are defined upon the designation of each site in a management plan called a “Document of Objectives”. However, financing, jointly assured by the dedicated funds of the European Union and the French state, is often, unfortunately, insufficient for the necessary actions.

This territory shelters a mosaic of diversified habitats that support an exceptional biodiversity. There are no fewer than seven Natura 2000 sites in our area! A rather rare situation on such a scale, which can be explained by the presence of 15 habitats and more than 50 species known for their heritage value in Europe. Even more so, this area of 400 km² represents a typical sample of Mediterranean regions. One finds here 10% of habitats of Community interest along with numerous Mediterranean endemic species such as the Bonelli Eagle on less than 1% of the total surface of Mediterranean sites.

This *Terra Musiva*, “land of mosaics” in Latin, is what this LIFE project intends to preserve. Made up of 38 actions, this programme is up to the challenge at hand. The biodiversity of our territory is confronted with complex and varied threats: abandonment of pastoral lands, unsuitable agricultural and forest management practices, presence of invasive or exotic species, pollution and other perturbations.



Site Natura 2000


- Camp des Garrigues (DO)
- - - The Gardon & its gorges (HD) & the Gorges du Gardon (BD)
- Garrigues of Lussan (BD)
- The Cèze & its gorges (HD)
- Pond & marshes of La Capelle (HD)
- Pond of Valliguières (HD)





Project objectives





To reinforce biodiversity conservation in the Garrigues of the Gard, the LIFE *Terra Musiva* project aims to:

 Protect and restore four habitats of Community Interest with an “unfavorable” conservation status.

 Improve habitat quality for nine species of birds, mammals and amphibians with “unfavourable” conservation status.

 Take account of insects with multiple roles such as prey, indicators of the quality of habitats, decomposers and more.

 Support and develop agricultural and grazing practices that are favourable to biodiversity.

 Involve, guide and inform inhabitants, professionals and elected officials of the territory.

The originality of the LIFE *Terra Musiva* project lies in its coordination of actions that are situated all throughout the environments that constitute this mosaic of landscapes in the territory.

↓ An exceptional natural heritage ▪ SMGG





↑ Pits of Fournès • Olivier Philippe

Open environments



The closure of open environments threatens heritage habitats such as the Mediterranean pseudo-steppe with grasses and annuals, as well as species that are fully dependent on open environments and cannot live without them. Bonelli's Eagle finds its food in open environments, while the Woodlark and the Tawny Pipit both nest and feed there.

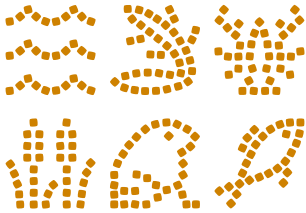
However, open environments are experiencing a progressive closure under the effect of the natural forest dynamics that are no longer curbed by pastoral pressure.

Main actions planned:

Open up environments (by uprooting and clearing brush) over approximately 550 hectares in five years. These areas will then be kept open thanks to shepherds who will graze their herds on these sites. Facilities such as rabbit warrens will also be installed to support the populations of prey species such as Bonelli's Eagle.



Wetlands



Two thirds of wetlands have disappeared from France in 100 years.

And yet, they provide environmental services to our society by reducing the intensity of floods and by storing more carbon than forests! Wetlands are reservoirs of biodiversity on which many species depend. In our territory, these areas include rich environments such as temporary Mediterranean ponds that are essential habitats for many amphibians, including the Great Crested Newt. Amphibians such as the Western spadefoot, a toad endemic to southwest Europe, are not only threatened by the degradation of the quality of their habitats, but also by their fragmentation. For example, the roads around the site constitute obstacles to ecological continuity and are the cause of numerous fatal collisions during migrations.



↑ Pond and wetlands of La Capelle ▪ T. Gendre

Main actions planned:

The creation and restoration of 20 ponds and the implementation of protective devices for the protected species that reside there: creation of a wildlife passage intended for amphibians (“crapauducs” in French) and the implementation of voluntary work periods to fight against the Louisiana Crayfish.



Agricultural environments

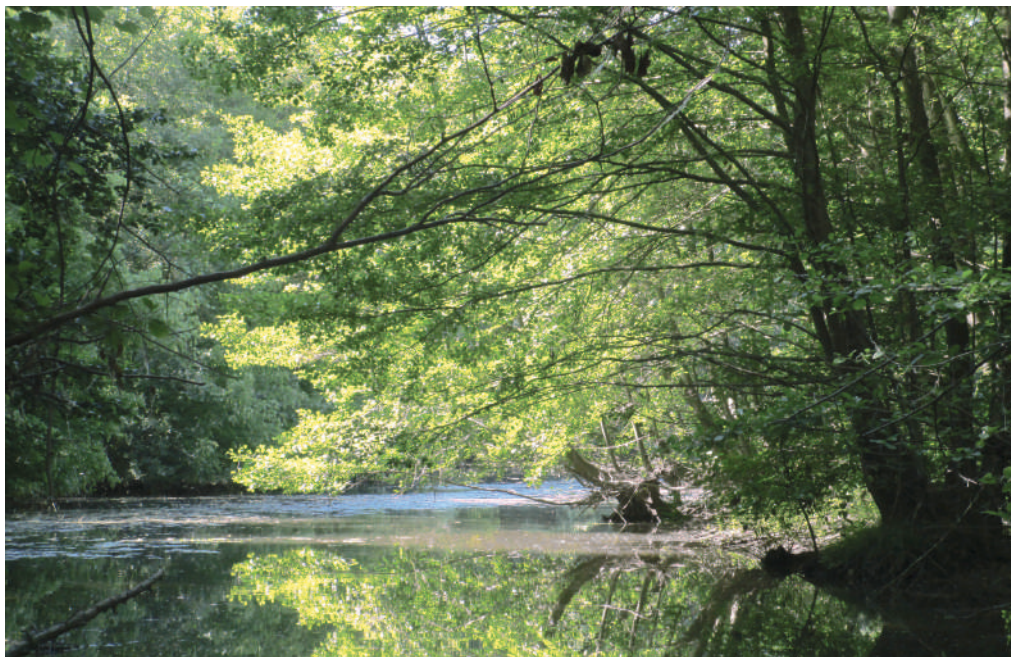
While certain agricultural or pastoral practices can be very harmful to biodiversity (i.e. monoculture and the use of phytosanitary products, especially insecticides), other practices can play an essential role in preserving habitats and food resources (insects) for threatened species such as the Little Bustard or the Woodlark.

Main actions planned:

Support for 30 farmers and breeders to develop the implementation of practices favorable to biodiversity: eco-pastoral management of rangelands, “alternative” management of parasite risk to safeguard coprophagous insects, implementation of agricultural practices on plots of land or an entire farm (i.e., planting of hedges, agroforestry, alfalfa fields).



↑ Agricultural plain on the site of the garrigues of Lussan, towards Montclus • Rachel Peltier



↑ Riparian forest of the Gardon • EPTB Gardons

Wooded environments



The riparian forests of the Cèze and Gardon rivers include several habitats of Community interest such as alder woodlands on floodplains and Mediterranean riparian poplar forests.

These woodlands are in a poor state of conservation due to historical methods of watercourse use (i.e., channeling and removal of sediments) and inappropriate management practices that continue today, notably clear-cutting for the exploitation of energy wood. These activities continue to impact habitats and can even limit their regeneration. In addition to their role of water filtration and protection against floods, the riparian forests of the Gardon and Cèze rivers play multiple ecological roles for different species, acting as hunting corridors for bat species such as the Great Rhinolophus and as a breeding ground for certain dragonflies.

Main actions planned:

The protection of at least 170 hectares of riparian forests on the Cèze and Gardon rivers.



Urbanized areas



Municipalities have a major role to play in the preservation of biodiversity.

The Proof? Even urbanized areas can be favourable places for certain species such as Geoffrey's bat (*Myotis emarginatus*) which has taken up residence in a barn in the heart of the town of Dions. This colony is the largest in the region with 600 individuals. However, its juvenile mortality has increased since the modernization of public lighting.

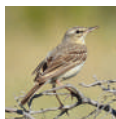
Main actions planned:

Three pilot communes, Sanilhac-Sagriès, La Capelle-et-Masmolène and Bouquet will be trained to better understand biodiversity in the management of municipal assets. They will also contribute to a toolbox for the municipalities of the territory. The neutralization of light pollution will also be pursued, in Dions in particular.





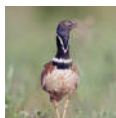
Pseudo-steppe with grasses and annuals
Thero-Brachypodietea*
(H6220)



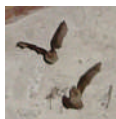
Tawny pipit
Anthus campestris



Woodlark
Lullula arborea



Little bustard
*Tetrax tetrax**



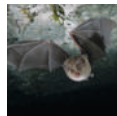
Geoffroy's bat
Myotis emarginatus



Bonelli's Eagle
*Aquila fasciata**



Alluvial forests of black alder *Alnus glutinosa* and common ash *Fraxinus excelsior** (H91E0)



Greater horseshoe bat
Rhinolophus ferrumequinum



Mediterranean temporary ponds* (H3170)



Northern crested newt
Triturus cristatus



Western spadefoot
Pelobates cultripes








Lesser mouse-eared bat
Myotis blythii



Gallery forests of white willows *Salix alba* and white poplars *Populus alba* (H92A0)



-  Wooded environments
-  Wetlands
-  Open environments
-  Agricultural environments
-  Urban areas

↑ A mosaic of environments that are home to multiple species and habitats ■
Laurent Arthur, Frédéric Baudat, Françoise Collet, Marc Fasol, Gilbert Lacassin,
habitats-naturels.info, Manon Latour, Regard du Vivant, SMGG

*Priority habitat or species



And why not find out more? Tell your friends and family, get invoveld!

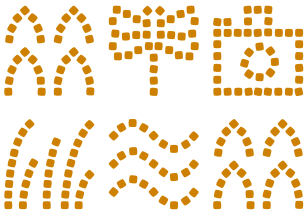


In view of both the urgent need to act and the many causes of biodiversity erosion, the LIFE *Terra Musiva* project pays particular attention to raising awareness of biodiversity issues in order to allow everyone to better understand our natural heritage and to encourage people to protect it.



↑ School event • SMGG Aloyse Mendoza

Main actions planned



LIFE *Terra Musiva* has put a lot of effort into raising awareness.

Our programme includes seven actions, some of which are truly unique! For instance, we have a mobile museum, which is a kind of educational truck that crisscrosses the territory, visiting markets, fairs, and schools. There are also educational land areas, with participative sciences, and three federative and festive moments around the theme of biodiversity. There is something for everyone!

Would you like to know more?

Send an email to Mélissa Hoffmann Bernard,
Project Coordinator
m.bernard@gorgesdugardon.fr



LIFE what is it?

The European Union provides technical and financial support to the public policies of the Member States through funds that cover many sectors: social, economic, agricultural, health, etc.






The most well-known European support fund is the CAP: the Common Agricultural Policy. For the environment, the fund is called LIFE.





LIFE Terra Musiva in numbers

5-year duration (01.01.2022–01.09.2026)
Total budget: 6,106,375€

including:

-  European Union: 4,579,781€ (75% of the total)
-  Occitania Region: 400,000€
-  Rhône Méditerranée Corse Water Agency:
336,772€
-  French Ministry of Ecological Transition: 200,000€
-  EDF Group Foundation: 10,000€

-  Number of jobs created: 8
-  Local economic impact: (companies that will provide services such as uprooting work):
€3,000,000

For more information, visit:

www.life-terra-musiva.org

Find us on Facebook

www.facebook.com/lifeterramusiva



9 partners in action

Coordinator

The Syndicat Mixte des Gorges du Gardon is the initiator of the project. The Syndicat coordinates and implements the programme.



Coordinator



Associated technical partners



Associated technical partners

The Syndicat Mixte des Gorges du Gardon has had eight technical partners on the ground from the beginning of the project:

- 🏠 Le Conseil Départemental du Gard
- 🌿 Le Conservatoire d'Espaces Naturels d'Occitanie
- 🍷 La Chambre d'Agriculture du Gard
- 🐦 Le COGard
- 🌱 Les Ecologistes de l'Euzière
- 🌾 La Fédération Départementale des CIVAM du Gard
- 🏠 Le CPIE du Gard
- 🏡 La commune de La Capelle-et-Masmolène

Each one carries out actions according to its competences.

Main funder



Co-financers

