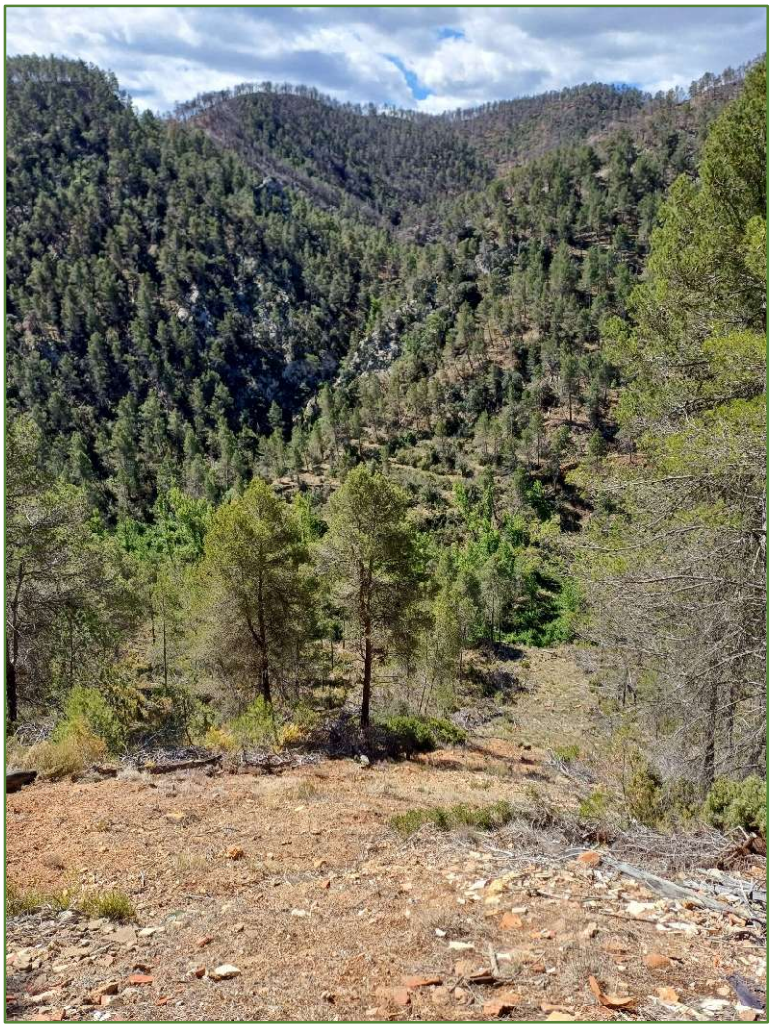
Desert Leaves

Alto Mijares Ecorestoration

Reforestation Project in Fuente La Reina (Spain)



February 2026

Desert Leaves

desertleaves.org

In 2020, a group of scientists, entrepreneurs and philanthropists founded **Desert Leaves**, based on their conviction that science-based forestry is an answer to a number of challenges that our planet is facing today, such as global warming, desertification and habitat destruction.

The mission of Desert Leaves is to increase and disseminate knowledge about forests and forestry in drylands, to connect and support people and organisations around the world involved in dryland forestry and forest conservation, and to support initiatives that pursue sustainable forest growth in drylands.

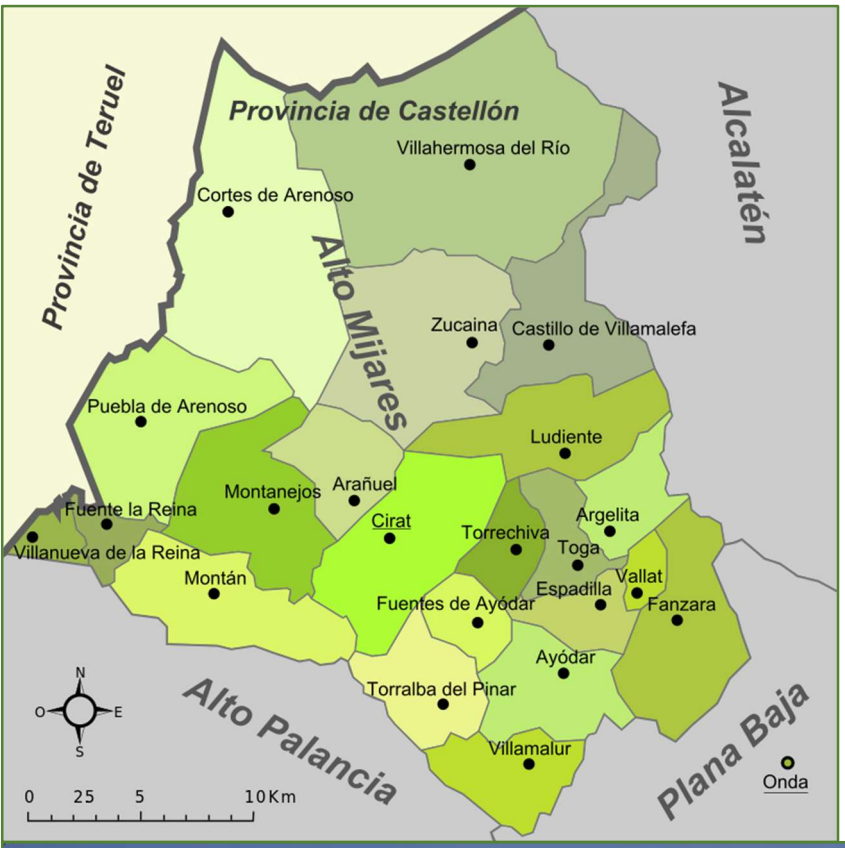
Desert Leaves focuses on three lines of activity: education, awareness raising and projects.

In education, it organises courses, scholarships for students, and technology transfer days. In the awareness-raising area, it organises symposia for different groups, and produces publications in the press, on the internet and in social media. In the area of project development, it promotes specific forestation initiatives in arid and semi-arid areas, both in Spain (Murcia, Valencia, ...) and in other countries.

Desert Leaves Foundation is an official partner of the United Nations Decade of Ecosystem Restoration and the UN Convention to Combat Desertification (UNCCD).



Fuente La Reina and the Alto Mijares



The Alto Mijares is a mountainous region in the southwest of the province of Castellón, dominated by the valley of the Mijares river. The climate is one of the coolest in the province. The landscape is marked by uncountable fountains, canyons, caves and natural pools. It is the perfect place for outdoors activities such as walking and climbing. The Alto Mijares has a rich and diverse wildlife; in the mountains and forests dwell mammals such as Wild boars, Roes and Spanish ibex. In the rivers we can find Otters, King Fishers and the endemic Turia nase. This region is also the home to large birds of prey, such as the Golden eagle, Bonelli's eagle and Eagle owl.

In the Alto Mijares lies the village of Fuente La Reina. It is situated on the northern slopes of the Sierra de Montalgrao, between 800 and 1100 meters above sea level, on an extremely rough and rugged terrain. Fuente la Reina is part of the Natura 2000 Network, a European ecological protection network for the conservation of biodiversity.



The 2023 Wildfire





The fire that affected Fuente La Reina in March 2023 originated in the Barranco de Sentenal, in Villanueva de Viver, accidentally during maintenance work. This forest fire spread and forced the evacuation of several villages, including Montanejos, La Alquería de Montanejos, La Artejuela, Fuente La Reina, Los Calpes, Puebla de Arenoso and its hamlets. The area affected was 4,500 ha.

The impact on nature was devastating, with large areas of forest and scrubland destroyed. The loss of natural habitats affected numerous species of fauna, including birds, mammals and reptiles. In addition, soil quality was compromised, increasing the risk of erosion and hindering the natural regeneration of vegetation.

Desert Leaves and the **Fuente La Reina Municipality** joined forces to restore this area in a gradual and sustainable way.



The Restoration Project

In August 2024, one year after the great fire that affected 4,500 hectares in Alto Mijares, an initiative was born to turn around the degradation of the forest: the Town Council of Fuente La Reina and Desert Leaves Foundation signed an agreement to jointly undertake the restoration of the affected land in the municipality.

With the support of the Consellería de Medio Ambiente de la Generalitat Valenciana, we designed a project that has several objectives:

- To stop erosion in the forest that has lost its arboreal vegetation, using the trunks of burnt trees as a barrier against runoff;
- To repopulate the forest with native trees, ensuring an interesting biodiversity;
- Avoiding and minimising future forest fires by choosing the right plants for reforestation, creating a mosaic landscape and organising maintenance work.

In this way we hope to generate benefits for the people, both locals and visitors, and for the natural environment of the area, which can be summarised in the following points:

- Recovery of an attractive **landscape**;
- A more diverse and fire resilient **ecosystem**;
- **CO_2** absorption in the trees as they grow;
- Better infiltration of **water** into the subsoil, which protects the aquifers and avoids water torrents in times of heavy rain;
- Recovery of the economic potential of the area, especially tourism and hospitality.





The Project in Numbers

The Alto Mijares Ecorestauration project is being carried out in **3 different plots**, chosen for their soil conditions, accessibility and state of vegetation.

The first actions are focused on the felling of dead trees to eliminate the risk of falling, and the placement of new barriers against erosion using part of the burnt trunks that have remained on the burnt land. In addition, micro-basins or 'alcorques' are being constructed, with a surface area of between 0.8-1m2, which allow for the collection of runoff from irrigation and rainwater, in some areas, to facilitate retention and improve the results of the plantations.

A total of **8,218 trees** and shrubs of **7 different species** are planned to be planted:

- Portuguese oak
- Whitebeam
- Strawberry tree
- Aleppo pine
- Holm oak
- Carob
- Hawthorn

When mixed plantations are carried out, the less flammable species are placed on the outside, planting a strip of more fire-resistant species in the perimeter area to prevent forest fires.

For protection against wild fauna, individual guards are used.

During their growth, estimated to take thirty to forty years, the plants will sequester some **1,356 tonnes of CO_2**.

Aftercare is foreseen, including supportive irrigation in the first 2 years after planting, replanting of the plants that have not survived the first years, the installation of information signs, and vegetation control to ensure optimal growth of the trees.





A Project for all, among all





In order to make this project possible, the project has the support of several actors, each contributing with their own resources:

The **Town Council of Fuente La Reina** ceded the land for the afforestation project, 3 plots in total, for a period of at least 40 years, committing itself not to use it for any other purpose than forestry during this period;

The **Desert Leaves Foundation** coordinates the project, both technically and financially, and hires the professionals who put their efforts into the project;

The **Generalitat Valenciana** provides part of the plants to carry out the repopulation, coming from the nurseries it manages. A total of 8 trees and bushes of 7 different species are expected to be planted.

Your Contribution to the Project

In order to make the 8.4 hectare reforestation project possible, we also receive financial support from **companies**. In this context, the project is registered in the register of absorption projects of the Ministry of Ecological Transition. Spanish companies sponsoring the project will thus be able to obtain the **Calculo-Reduzco-Compenso Seal**, guaranteeing their reduction of greenhouse gas emissions.

With their help, the companies contribute to the improvement of the Alto Mijares region, from a Corporate Social Responsibility motivation, and make their **social and ecological commitment** visible through the means of communication available to Desert Leaves: posters in the reforested areas, news in social media and web pages, and other actions that can be designed jointly.

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Contact

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