

## A mineral world

Everywhere, thin, stripped soils reveal bedrock in the form of fractured or cracked slabs, ruiniform landforms or pebbles. In the cavities dug by erosion, thicker soil may have formed, where boxwood and other shrubs find acceptable conditions for their growth. These limestone blocks and slabs, shaped over geological time, have also been a material of choice for man. The remains of shepherds' huts and enclosures, old quarries or hutches, carefully crafted stone piles to increase the grassland area, are all evidence of an ancient human occupation.

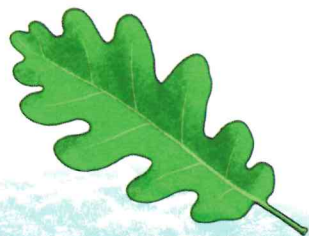


## The come back of the white oak

Without human interference it would certainly colonize the whole territory. Officially known as pubescent oak, the white oak (which is black in Périgord!) is widely present south and east of Lake Sainte-Croix. The Pubescent Oak grove even appears as a stable condition of vegetal formations in the hills of Haut-Var. In Sulagran, it only survives as small patches, such as in Les Molières, to the west of the site. On the tip of the peninsula, white oaks have already partially recolonized the former pastoral lands. A few small isolated specimens are even found in the scrubland.

## Unexpected hosts

After the valley was flooded in 1974, vegetation initially growing along the river, at the bottom of the valley, is now found at higher altitudes, closer to the top of the hills. In Sulagran, a forest of hygrophilic species has gradually settled. Willows or white poplars, whose adult specimens can consume several hundred litres of water per day, show a striking contrast with the stunted and dry vegetation of the scrubland striving to survive just a few metres away. To the northeast of the trail, on the shoreline, white poplars rooted in split limestone slabs exposed by the lake's tidal range, to form a dramatic landscape.



Pubescent oak leaf, one of the best truffle tree species

Town of Bauduen

# The Sulagran peninsula

*A waterfront scrubland*



Discovery booklet

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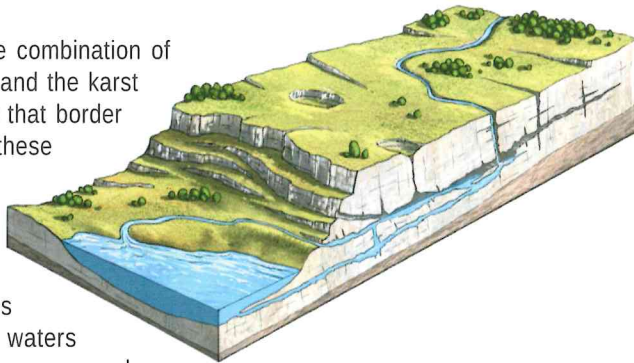
# Sulagran

## A waterfront scrubland

The tip of the Sulagran peninsula is an unusual place, mostly occupied by a scrubland, i. e. plants that are not very demanding in humus, adapted to summer drought and high sun exposure on a limestone ground. Yet water is omnipresent on this hill, whether the turquoise waters of Lake Ste. Croix that surround it or the underground water that flows there in unsuspected quantities. Few meters apart, the xerophilic and aromatic plants give way to the large white poplars, known for their great need for water. On the shoreline, the lake water sometime stripped the soil and exposed large banks of limestone, evoking the stairs for some giant in need for a drink. Far from being void of all life, Sulagran is home to a microfauna of arthropods, including some rare species. Here, the scorpion, which favours hot and arid lands, is a close neighbour of the dragonfly, born underwater. Humans, probably no stranger to the formation of this scrubland, left some traces of their presence.

### A karst hill

The aridity of the soil is due to the combination of the dry and hot climate in summer and the karst nature of the geological formations that border the southern part of the lake. On these limestone soil, rainwater seeps into the ground and gradually dissolves the rock, digging caves, galleries and underground rivers over time. At the end of a course of sometimes several tens of kilometres, these waters emerge in the open air through resurgences, such as Fontaine-l'Évêque, at the foot of Sulagran. Now underwater in the lake, this Vauclusian spring was one of the most important in France.



### A changing environment

The Mediterranean climate and geology alone do not explain the formation of scrubland, which is often the result of human degradation of the forest environment. Secular agro-pastoral practices such as grazing in the forest, collecting leaves for animal bedding, burning or collecting acorns lead to the impoverishment of humus and the possibility of forest regeneration. The gradual disappearance of trees then made the soil more vulnerable to rainfall erosion, which can be very heavy in the Mediterranean region. At the end of this degradation cycle, new plant species, more adapted to shallow soils, summer drought and high sunshine, eventually colonize the area. The scrubland thus constitutes an in-between, which evolves slowly, and whose dynamics would lead, under natural conditions, to the return of the forest.

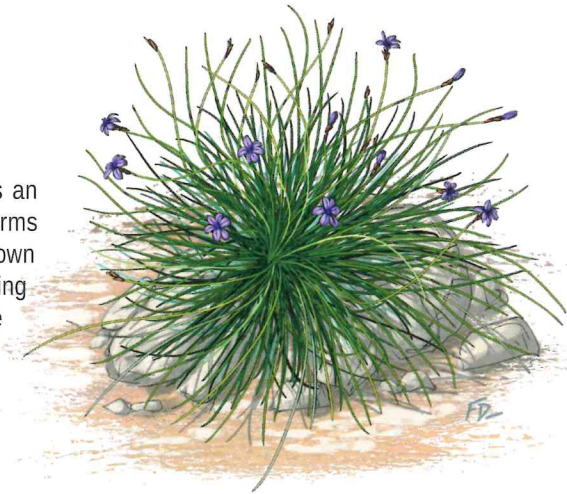


### Xerophilic plants

To resist the sun and lack of water, the plants of the garrigues have redoubled their ingenuity. Some have developed small, tough, rolled, glazed or waxed leaves to limit evapotranspiration. For the same reason, fluffy hair often protects their underside. Others are lined with thorns that both keep herbivores away and promote dew condensation. Aromatic plants such as thyme or lavender, project a volatile cloud around them which, like a mist, locally lowers the temperature and maintains humidity. The plants of the scrubland have a very slow growth but show a tremendous capacity of adaptation.

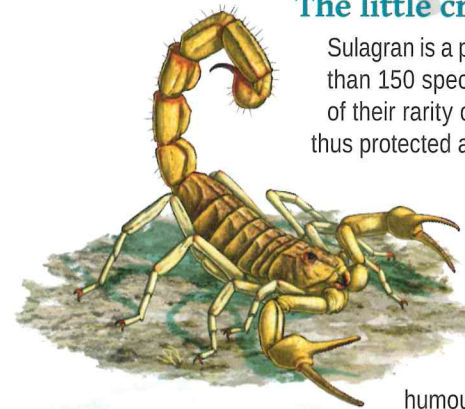
### The aphyllanthus of Montpellier

With the true lavender or thorny euphorbia, it is an emblematic plant of this type of scrubland. It forms tufts of thin stems reminiscent of the rush. Also known as the Montpellier blue carnation, it flowers in spring on rocky soils and varies in colour from pale blue to lavender blue. The Montpellier aphyllanthus is much appreciated by sheep and goats as main winter fodder. Its sweet taste gives a distinctive taste to meat and cheese.



### The little creatures of the garrigue

Sulagran is a prime site for insects, spiders and other arthropods, with more than 150 species living there. Of these, about ten are important because of their rarity or because they are threatened. Three butterfly species are thus protected at the national level and three cricket species are included in the National Red List. In the air, on the leaves, under the stones, in the ground, these little animals are everywhere and we just have to bend down to enter the intimacy of this strange and fascinating world. The largest of all these creatures is undoubtedly the very discreet yellow scorpion of Languedoc, which spends its days dozing under the stones. Known for his bad temper and lack of humour, it is not recommended to disturb him in his nap....



# The Sulagran peninsula

Lake of Sainte-Croix

Location of the spring  
and the hamlet of  
Fontaine-l'Evêque


Sulagran



Access road

D 71





Tour du lac de Sainte-Croix  
long-distance hiking trail

## A property of the Conservatoire du littoral

Before the dam was filled with water in 1974, Sulagran was the name of a hill that dominated the hamlet of Fontaine-l'Évêque, located around the Sorps spring, then one of the most important resurgences in France. It is still today the groundwater of Fontaine-l'Évêque, pumped on the hill, that supplies the villages of Haut-Var. Acquired in 2010 by the Conservatoire du littoral, this 30 hectare site is open to pedestrians to enjoy its small beaches carved out of limestone banks and the particular atmosphere of open and very arid spaces. An ecological diversity to discover along a 1500-metre circuit that runs around the peninsula.

## Access and car parks

- From Bauduen, exit the village on the D49 to the crossroads with the D71 (2.3 km). Turn right towards Baudinard and follow the D71 for 3.2 km. At the exit of a large curve to the left, take the track to the right towards the car park.
- From Sainte-Croix-du-Verdon, take the D111 to the Sainte-Croix bridge, near the dam. At the exit of the bridge, turn left towards Aups. Follow the D71 for 2.7 km and turn left onto the track leading to the car park.

Les Molières

Conservatoire du  
littoral



Lake tour hiking trail



Loop walks



Car park

## Sulagran trail

Longueur : 1,5 km – Difficulté : facile

This looped walk is part of the Tour du lac de Sainte-Croix long-distance hiking trail. From the car park, turn right towards the lake. You will first cross an open and arid space, punctuated by aromatic plants, irises and aphyllanthes. A very different atmosphere awaits you on the shore, marked by large limestone banks exposed by the lake waters. Plants adapted to drought are leaving ground to hygrophilic vegetation. Many white poplars are found rooted in the cracks of the limestone banks.

As you climb up, you will walk past a more enclosed area where the oak grove gradually recovers its rights.

Here and there, hutches and remains of dry stone walls remind us of pastoral activities that have disappeared. Further on, evidence of an old stone quarry can still be seen. After the pumping station, the trail descends to the shoreline, where it is often possible to observe the whirls caused by the powerful resurgence of Fontaine-l'Évêque, which is now drowned in 60 m of water. You then return to the car park via the GRP.

Please help us protect this site: waste containers are to be found in the village. Remember that hikers have a priority, cyclists are required to slow down as pedestrians approach. Make sure you keep your dog on a leash. Due to the high risk of fire, wild camping is strictly prohibited on the dry hills of the Haut Var. The mainly stony paths require comfortable walking shoes.