

TEACHING GUIDE

Soak up the scenery
of THE MADRIU-
PERAFITA-CLAROR
VALLEY



Vall del
Madriu·Perafita·Claror

RÀMIO Route

Be prepared!

Information on the surroundings and the route:

The Madriu-Perafita-Claror valley is a long glacial valley that goes from the east to the west and is highly valued, both thanks to its UNESCO-recognised cultural heritage and its natural assets.

The Ràmio route, by the Fonts circuit to Ràmio is situated within the valley and belongs to the Escaldes-Engordany parish. Following the Fonts circuit to Ràmio allows you to discover the great natural and cultural heritage of the valley landscape (forests, springs, contours and human imprint).

Look after the surroundings:



Access to motorised vehicles is forbidden.



Between September and February, hunting may take place. Do not leave marked paths and wear clothing in visible colours.



Wild camping is not allowed. Overnight tent camping is only allowed from sunset to sunrise. You must always ask for permission from the Municipality.



Part of the valley is private property. Respect it.



Take any rubbish home with you and discard it in the appropriate bins.



For safety and conservation reasons, it is strictly forbidden to light fires, except in recreation areas with barbecues.



Respect the animals in the mountains. Do not touch them, frighten them or given them anything to eat.



The valley has an extensive network of footpaths. Avoid leaving marked paths so as not to damage local ecosystems.

We recommend...

Wear comfy shoes, take a full water bottle, something to eat along the way and sun protection. It may also be a good idea to have a pencil and some colouring crayons to fill in the field notebook, a camera or mobile phone to record images or videos and binoculars to make observations.

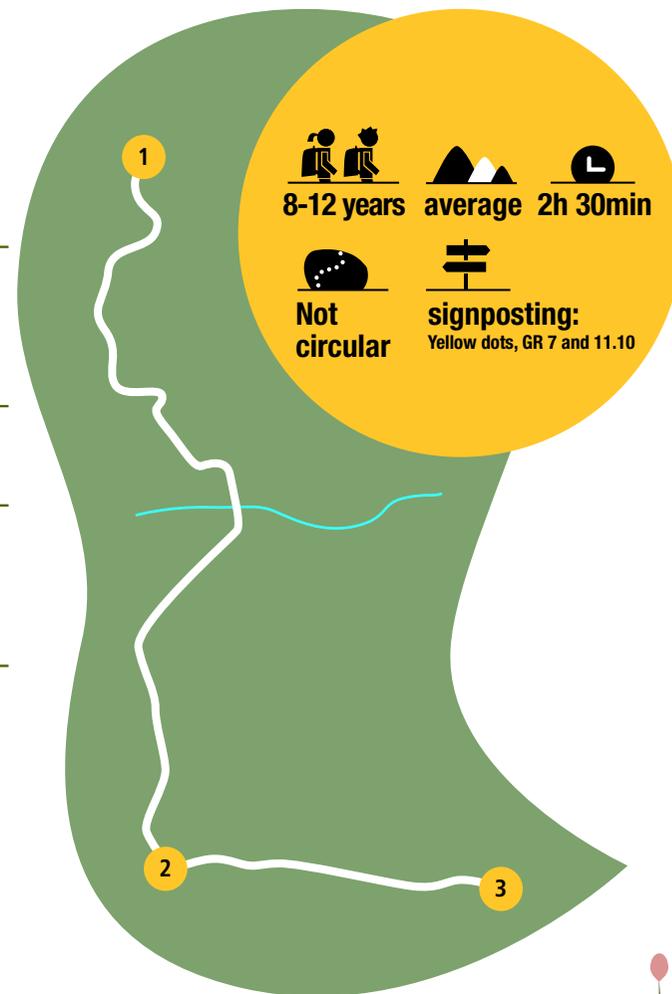
Check the weather when you're planning your outing!



RÀMIO Route

Information on the route:

	place altitude	distance ascent	time	coordinates	description
1	Les Fonts Circuit 1,630 m	(-)	(-)	N42 31.047 E1 34.255	Start and finish point: from Escaldes-Engordany, you'll need to follow Engolasters road (CS-200) for 6.2 km. At the start point, there's a car park for vehicles and an information board.
2	Jovell Hill 1,775 m	1,756 m (+145 m)	50'	N42 30.102 E1 33.827	From the car park, follow Cami dels Matxos (GR 11 - Mule track), which runs along a wide track. Ascending through fir woodland, you get to Jovell Hill.
3	Ràmio 1,615 m	4,250 m (-6 m)	1 h 15'	N42 29.873 E1 34.442	The path goes down the southern slope of the Madriu, in an area with a spectacular view over the valley. The passage through scree marks the proximity with the crossing of the Mountain path, just above the Ràmio refuges. Retracing your steps, you'll reach the starting point of the route.



Preparatory activity

Birdsong recordings

Along the way, you'll hear several birds that live in the valley's forests. We've collected the most common ones.



Download the audio files and take them with you on the route as they will help you to identify them.



Crested tit (*Lophophanes cristatus*)



Goldcrest (*Regulus regulus*)



Chaffinch (*Fringilla coelebs*)



Short-toed tree creeper (*Certhia brachydactyla*)



Great tit (*Parus major*)



Black woodpecker (*Dryocopus martius*)

Discover me!

The aim of the Ràmio route, by the Fonts circuit to Ràmio is to get to know the most characteristic features of biodiversity and the cultural heritage of the valley through the character of a fox, who sets you a challenge and asks you to follow the route she took.

The challenge:

My name is Mena and I'm a fox who lives in the Madriu valley. If you're curious like me, I'd like to invite you to share a reportage of what you find along the way.

Keep your eyes peeled and enjoy this beautiful valley full of surprises!

I'll see you out there!

Field notebook:

The route is planned as a journey of discovery that heightens children's capacity for observation and curiosity. The field notebook will be used to take down answers/actions for the proposed activities:

1. The old Engolasters hydroelectric route

In the middle of the 20th century, a huge network of canals was built to make the most of the water from the Madriu river and produce hydroelectric energy. Put together a report of the evidence of this canal network that you find along the way.



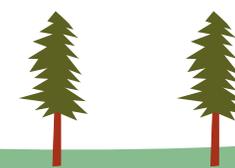
During the route, you can find testimonials such as panels, traces of the Ràmio canal or the Camí dels Matxos (mule track) itself, which is named after the use of these animals (mules) for transporting materials during construction of the Engolasters dam.

You can watch the **hydraulic energy** video to understand how energy is produced using the force of water.

WATCH
THE VIDEO



<https://www.youtube.com/watch?v=33477ozUhw>



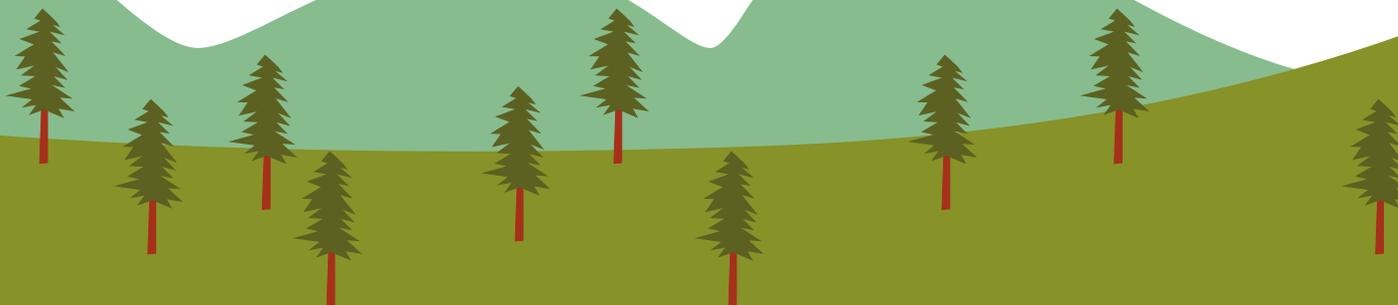
RÀMIO Route

2. Scots pine woodland

Lots of birds live in this Scots pine woodland, where they feed on pine cones or plants on the forest floor, like snow-rose or bilberry. If you look very carefully and quietly, you may see or hear some of the animals below.

Scots pine (*Pinus sylvestris*) forms extensive pine forests and is able to withstand very cold winters and high humidity. It has a slender, straight trunk that can reach up to 30 m in height. The youngest branches and the top half of the trunk are a reddish colour. The leaves, short and rigid, are a blueish colour. The pine cones are small, around 3 to 6 cm long. In the undergrowth of the Scots pine, you'll find snow-rose (*Rhododendron ferrugineum*), bilberry (*Vaccinium myrtillus*), box (*Buxus sempervirens*) and common juniper (*Juniperus communis*).

Keep quiet as you go to enjoy the song of the birds that populate the forest.



3. Les Fonts circuit view point

After crossing the tunnel, you'll come across a view point where you can see a spectacular view across Andorra's central valley. Take the opportunity to snap some pictures.

From the view point, you can first see the meadows and fields, and Sant Miquel d'Engolasters Church. At the bottom of the valley, you'll find towns such as Andorra la Vella or Escaldes-Engordany. It's also possible to identify the emblematic peaks that surround them, such as Medacorba, 2,914 m high.



RÀMIO Route

4. Rocks among the greenery

Along the way, you'll have come across scree. Scree is a collection of broken rock fragments that you can find on some mountain slopes. How do you think they got here?

Scree forms due to the freezing and thawing processes that rocks suffer over time, causing them to fragment.

Granite is formed by the slow cooling of large masses of magma to a great depth. This magma appears on the surface due to erosion of the rocks in the upper layers.



5. What does someone who works in silviculture do?

Since ancient times, the inhabitants of this valley have explored the woodland to extract natural resources like wood, making sure not to damage the surroundings. If you worked in silviculture, what tasks would you need to do? Choose the correct answers.

- 1 Plant lots of trees at once.
- 2 Clear the weakest young trees that are least resistant to wind and snow.
- 3 Cut down all the big trees to use their wood.
- 4 Maintain the strongest and most developed trees.
- 5 Conserve parent trees to scatter their seeds.

Correct answers: 2, 4 and 5.

Currently, forest management is promoting the model of **irregular forest**, with trees of different ages within the same forest mass. Forests are thus more stable in episodes of natural disaster or plagues, the ground is better protected because there's always tree cover and biodiversity is favoured.



Action!

Following the life of a pine tree

As you wander through the valley, you'll find lots of pine trees. Why not gather a few seeds from a pine cone and plant them? Be careful as you plant them and take photos or record a video as they grow.

As a follow-up activity, we invite you to follow the growth of a pine tree, from planting the seeds to a mature tree.

Follow the steps below:

- 1 Collect the seeds. If you don't find an open pine cone, you can pick up a closed one and leave it out in the sun. After a while, when it opens, you can collect the seeds.
- 2 Plant the seeds directly in the garden or in a large pot. Water the land according to the time of year and take care of the sapling.
- 3 Growth. As the pine tree grows, increase the pot size or transplant it into the ground.



We suggest sharing your images on the Madriu valley social media, tagging them with the hashtag **#vallmadiuperafitaclor**.



Remember that completing your field notebook or sharing information on social media adds points to your visitor passport!

