

# BECOME A SCIENTIST AND HELP THE ENVIRONMENT

The study of the impact of climate change and of the life cycle of alpine plants is an activity to be observed at the sites of ARPA Valle d'Aosta. Experience trekking, Nordic walking or bicycle excursions (MTB or e-bike) with a visit to research sites.



## DETAILS OF THE ADVENTURE



4 HOURS



€ 90 PER GUIDE  
(GROUPS OF  
MAX. 12 PEOPLE)



FROM MARCH  
TO NOVEMBER



FAMILIES WITH CHILDREN,  
COUPLES AND SMALL GROUPS



9.00 AM - 1.00 PM  
2.00 PM - 6.00 PM



## FOR INFORMATION CONTACT

**TORGNON TOURIST BUREAU**

Piazza Frutaz, in the town centre.

Telephone: 0166.540.433

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E-mail: info@torgnon.net

Opening hours:

Sun-Mon-Tue-Wed-Thurs: 9.00 am-12.30 pm

Fri-Sat: 9.00 am-12.30 pm / 3.00 pm-6.30 pm

[www.torgnon.org](http://www.torgnon.org)



# TORGNON WILD NATURE

Outdoor science activities



## A VISIT TO THE PLACES WHERE MOUNTAIN ENVIRONMENTS ARE STUDIED



TORGNON. PURE EMOTION



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## LISTEN TO NATURE THROUGH SCIENCE

An unusual activity in which the excursion is enriched with stops at observation sites where scientific data is collected for research and to monitor climate change. On reaching the sites Tellinod and Tronchaney, you will notice technological instruments for data collection, and be amazed of what nature is capable of telling us.

### DATA THAT INFORM US ABOUT THE ENVIRONMENT



TEMPERATURE AND HUMIDITY OF AIR



RAIN



WIND FLOW VELOCITY AND DIRECTION



SNOW HEIGHT



SUN RADIATION



PHOTOSYNTHESIS  
(CARBON DIOXIDE EXCHANGE BETWEEN THE VEGETATION AND THE ATMOSPHERE)

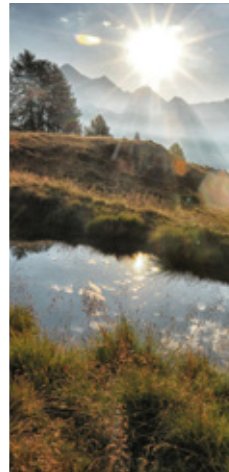


LIFE CYCLE OF PLANTS

## CLIMATE CHANGE

**We often hear the term climate change. But why do we say that the climate is changing?**

Data collection on temperatures has enabled experts to study the global progress of climate. They found that, starting from the early 20th century, the Earth has experienced **a mean temperature rise of 0.8°C**, though the warming process **has not been homogeneous** throughout the world. The Alps, for instance, have recorded a 1°-3°C temperature rise over the past 60 years.



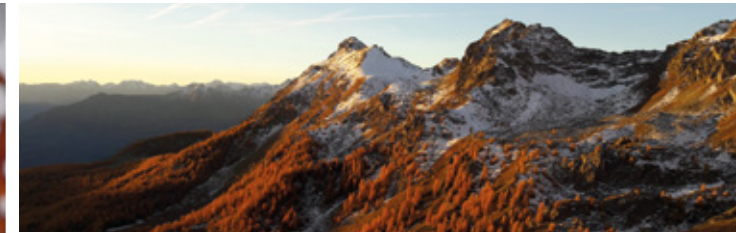
The phenomenon dates back to the early years of the **industrial era**, when the massive combustion of oil, natural gases and carbon commenced, and so did intensive cattle breeding. This contributed to alter the composition of the atmosphere. The quantity of CO<sub>2</sub> in the atmosphere today is **30% higher** than the amount observed before the industrial age.

## PHENOLOGY

Plants start **germinating** at the end of winter. They develop **leaves, flowers, fruits** and, finally, in autumn they either die or start **resting** before the forthcoming winter.

The life of plants and animals is, therefore, marked by the rhythm of regular events that occur in sequence every year around the same period, but the exact date can vary depending on **climatic factors**.

**The study of these events is called phenology.**



**The early onset of spring** is one of the most evident effects of climate warming on the ecosystems.

Visit the dedicated page on the website and discover all the details of the adventure

