GEOTRAIL



DURBUY





United Nations • Famenne - Ardenne Educational, Scientific and • UNESCO Cultural Organization • Global Geopark





WHAT IS A GEOPARK ?



UNESCO Global Geopark is a label awarded by UNESCO to a single, unified geographical area where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development. At the end of 2019. there were 147 Global Geoparks in 41 countries around the world.

L'UNESCO GLOBAL GEOPARK FAMENNE-ARDENNE

The Geopark encompasses the municipalities of Beauraing, Wellin, Tellin, Rochefort, Nassogne, Marcheen-Famenne, Hotton and Durbuy, all sharing the distinction of being located on the Calestienne, a transitional strip of 910 km2separating the Famenne and the Ardennes, and home to a population of 67,250 inhabitants. The two outstanding geological features of the Geoparkare its Calestienne limestones and their caves (karst systems)as they relate to the geological structure of the region.

The Calestienne

The landscapes found within the Geopark frequently reflect what lies beneath the surface. Among these landscapes, one particular strip stands out: the Calestienne, the common thread of the entire Geopark. This strip, consisting mainly of Givetian limestones, runs from Chimay in the west to Remouchamps in the east. It is bounded to the south by the Ardennes and to the north by the Famenne depression. The term Calestienne may be derived from the German Kalkstein (limestone), or from a prefix referring



A simplified map of the Famenne-Ardenne UNESCO Global Geopark superimposed on a relief map (LIDAR image), highlighting the link between the geology and the geomorphology. Sandstones are more resistant than limestones, which in turn are more resistant than shales, resulting in the relief visible on the map: to the south rise the heights of the Ardennes, ending in a narrow depression scooped out of the Eifelian shales, the limestone strip of the Calestienne standing out in relief (in blue) and to the north the shales of the depression (in brown). (Data sources:"Wallonia Public Service" http://geoportail.wallonie.be).

either to limestone or to heat (plants that grow on limestone are more thermophilic than those that prefer shale soils) – and from the Walloon word Tienne, meaning a high place.

Geological history

1. The geological history of the Geopark begins during the Devonian period (419 to 359 Ma) with the sedimentation of deposits of horizontal layers on the ocean beds.

2. These sediments will gradually become buried under their own accu-

System	Series	Stage	Age Ma
			359
Devonian	Upper	Famennian	372
		Frasnian	383 388 393 408 411
	Middle	Givetian	
		Eifelian	
	Lower	Emsian	
		Praguian	
		Lochkovian	419
			217

En géologie, la chronologie se réfère souvent au tableau stratigraphique. Ici un extrait pour le système dévonien (qui fait partie de l'ère paléozoïque). Les étages portent les noms des lieux où ils sont décrits. Le Geopark se situe au cœur de ces lieux importants pour la géologie du Dévonien moyen et supérieur.

mulation and undergo a slow process of transformation into solid rock. The main rocks beneath the Geopark are thus sedimentary: shales, sandstones and limestones.

3. These rocks would later undergo severe deformation, some 320 Ma ago, during the formation of an ancient mountain chain (the Variscan orogeny), the remains of which form the Geopark. This event is what produced the many folds and faults now clearly visible in the landscape, such as the Durbuy anticline. 4. The mountain chain was soon eroded down to a vast flat surface known as a peneplain, which still constitutes the subhorizontal skyline visible throughout Upper Belgium. During the latter part of the Secondary era (Mesozoic) and the early part of the Tertiary (Cenozoic), a warm and humid climate profoundly altered the limestone rocks and formed ghost-rocks, the precursors to caves. In the second part of the Cenozoic, the Ardennes bedrock was uplifted, the river system became incised and caves formed.

THE COUNTRYSIDE CODE :

- Respectnature, geological heritage, wildlife and plants; do not pick plants, flowers or fruit of any kind.
- Follow the highway code, which applies on country lanes just as much as on the rest of the road network, and obey any prohibitions or restrictions on traffic.
- Use the pavement wherever there is one, otherwise walk on the left-hand side of the road, facing oncoming traffic.
- Make sure you are visible to road-users at all times (wear light-coloured clothing).
- Opt for full-length trousers to ward off ticks.
- Stay on the paths by following and sticking to the permanent or temporary waymarking.
- Scrupulously respect private property: you must obtain the owner's permission before entering.
- When you meet other walkers, remain courteous at all times and be the first to offer a greeting.
- Keep noise to a minimum, to avoid causing nuisance to others.
- Do not startle or disturb grazing animals.
- Keep your dog on a lead and under control.
- Take all your litter home with you.
- Lighting fires is strictly prohibited.





Start/finish : Parking des Topiaires, rue de la Haie Himbe 2, 6940 Durbuy GPS (WGS84): Latitude : 50.352738 Longitude : 5.453636 Distance/Time : 2,5 km – 1 hour Elevation change : 50 m Level : easy

Urbuy owes its existence to its remarkable geological setting. The town first came into existence as a military stronghold, located on a tight loop of the River Ourthe, encircling a limestone outcrop. This strategic position combined two advantages: the outcrop provided a solid vantage point on which to build the fortress, and the meander offered a natural defence against attackers. A thousand years on, it is by no means easy to imagine how the landscape would have looked at the time of this human conquest. In addition to all the building that has taken place in the intervening centuries, the course of the River Ourthe itself has also shifted. This suggested trail gives you some idea of what that initial landscape would have looked like, including an unobstructed view of the Ourthe, the line of its long-vanished branch, and a chance to observe both the large and the small Durbuy anticline. The nameof Durbuy is thought to derive from the Celtic duro-bodion, " the dwelling place near the fortress". As an added bonus, the trail also takes you through the old town with its well-preserved ancient houses and cobbled streets.



Représentation du parcours du sentier pédestre (trait blanc) sur une image composée du fond IGN et du relief obtenu par procédé LIDAR (Sources des données : Service Public de Wallonie http://geoportail.wallonie.be). L'emplacement des alluvions rend parfaitement compte de la géométrie du méandre recoupé ainsi que de l'ancien cours de l'Ourthe asséché au XVIII^e siècle. La rivière et l'étang au pied de l'Anticlinal sont en bleu foncé.

The trail starts from the Parking des Topiaires car park. Leave the car park and turn leftalong the northern edge of the park, along rue de la Haie Himbe.

You are now walking alongside one of Durbuy's most famous attractions. The Parc des Topiaires, on the banks of the Ourthe, is home to over 250 different topiary figures shaped out of boxwood. Don't be surprised if you come across a mermaid, an elephant, a crocodile or even our old friend from Brussels, "Manneken-Pis". The practice of clipping bushes and shrubs to form shapes dates back to Roman times, more specifically to the time of Pliny the Younger (62-113 AD). He used the term topiarusto refer to his gardeners, brought from Egypt or Syria as slaves It was they who introduced the art of topiary, the trimming and clipping of bushes, shrubs and trees into the shapes of wild animals or mythical figures. The plant most commonly used for this purpose tends to be box, Buxus sempervirens, but other suitable candidates include yew, laurel, spindle tree, holly and cypress. The art of topiary died out with the fall of the Roman Empire, and was not revived until the Renaissance. Some of the plants in this park are over 120 years old, tributes to the perseverance and patience of their artist-gardeners in creating these slowly-maturing works of art. For some of them, it has taken almost 20 years of painstaking shaping and clipping.

Le parc des Topiaires

Rue Haie Himbe 1 6940 B-Durbuy tel.: +32(0)86/219.075 Courriel: topiaires@durbuy.be Web: www.topiaires.durbuy.be Open from 2 January to 31 October (10am to 6pm);November (10am to 5pm);December (weekends and school holidays, 10am to 4 pm) €4.50 per person (free for children under 6, €1 each for children under 12).

After admiring the amazing topiary on display, be sure to pause and take in the view from one of the finest terraces in Durbuy !

After 260 metresof walking alongside the Parc des Topiaires, turn left into Chemin des Houblonnières. After 70 metres, cross the small park and take the bridge across the Ourthe. On the other side, take the path on the left, leading down to the riverbank. Follow the river downstream along the Chemin du Halage towpath. 170 metres further on, you will find yourself walking along what remains of the one-time branch of the Ourthe.

The town of Durbuy grew up on an island encircled by a meander cutoff of the River Ourthe, a position of great strategic importance. The site relied for its defence on the river surrounding the fortified enclosure, and on the castle, built on a rocky spur.It



Ourthe Valley and the footbridge, photo taken from the backwater of the Ourthe at the foot of the castle

was not until the 18th century that the meander was drained and filled in, leaving the dry bed of the former course where you now stand. Facing you stands the Chateau.

The town of Durbuy, first mentioned in written records in 1078, owes its existence to the castle. This landmark has had a chequered history, falling prey over the course of time to fire, dilapidation and destruction, alternating with periods of reconstruction. In its earliest form, the fortress was built primarily for military purposes, consisting of a platform on which stood a number of buildings and towers making up the fortifications. Accommodation was restricted to the bare minimum. From the 15th century onwards, the castle was to offer more comfortable quarters as rooms were added on the town side of the keep. The castle survived a number of wars before finally being razed by French troops in the 17th century. In 1731, the Duc d'Ursel, lord of Durbuy from 1726, embarked on its reconstruction. What he built, however, was not a fortress but a château, a courtly residence on the banks of the Ourthe. The chateau underwent further radical changes around 1880-1882, giving it the neo-Gothic style it retains to this day.

As the riverbank reveals, the base of the chateau rests on the limestone rock itself, providing solid foundations for the chateau. Between the chateau and the cutoff stands an impressive



The small Durbuy anticline on the bank of the former branch of the Ourthe, which forms the base of the chateau

folded rock formation:the small anticline (geological details below). This anticline, along with outcrops along the course of the Ourthe, reveals the existence of a rock several metres in height on which the chateau is built, makingit a natural vantage point over the surrounding terrain.

Leave the former course of the Ourthe and take the steps up to Rue du Comte Théodule d'Ursel. Turn left and enter the Old Town.

Durbuy Old Town

It was in 1078 that Durbuy was first mentioned in a written record, under the name of Dolbui castello. In the 12th-13th centuries, we find written references to the city of Durboiensis, translated as "Fortress of the Boïens". As we have seen, the town originally came into existence to serve a military purpose. That military strength enabled Durbuy to extend its protection to neighbouring villages and thus become a prosperous social and economic centre. As a major iron-founding centre in the 16th century, Durbuy and its 20 furnaces provided the Liège region with half of all its iron needs between 1530 and 1570. Durbuy was to decline in the 17th century, however, due to misfortunes and wars. Religious communities moved into the town to bring succour to the population, and their splendid convent buildings remain to this day. Economic renaissance was not to come until the late 19th century, however, with the rise of tourism. Durbuy is fortunate in possessing so many beautiful buildings, including its magnificent chateau rising above the town on its rocky peak. Its picturesque narrow lanes tempt the visitor to wander at will and explore the many and varied small shops and businesses to be found, including a wide choice of restaurants offering gourmet dining, local cuisine or a typical brasserie experience.

30 metres on, admire the half-timbered Halle aux Blés, with its striking red rendering, on your right.

Let us linger for a moment outside one of the town's iconic buildings, the Halle aux Blés or corn exchange, also known as the Spanish House. The earliest references to a building on this spot date from 1380, but the building we see today, with its extremely rare half-timbering, dates from the 16th century (around 15301540) and bears witness to the economic importance of Durbuy at the time, whose lands covered what are now several different communes. Its designation as the Halle aux Blés is somewhat misleading, and dates from the 19th century. The building in fact served a number of different purposes, housing both a covered market and the magistracy (the administrative and judicial centre for the county). The town declined in importance in the 17th century, as a result of the Thirty Years War and the disappearance of the iron-founding industry. The building fell into disrepair and the rear half, which had housed the covered market, had to be demolished in 1639. In the 18th century, it underwent further transformations but retained its role as the town hall until the end of the century. The building is now listed as



The Halle aux Blés or corn exchange, one of the outstanding buildings to be found in the old town an outstanding example of Wallonian heritage (as of 23/11/1976) and is home to the Durbuy Museum of Modern and Contemporary Art.

Carry straight on along Rue Comte Théodule d'Ursel to the church of Saint Nicolas.

This was originally known as the Récollets church. It was founded in 1632 by the Récollets religious order of mendicants and preachers, and consecrated in 1642. The front part of the present church corresponds to the earliest building. The church was restored and considerably extended in the 18th century. The Dukes of Ursel, who financed the work, had their coat of arms mounted in the vaulting of the choir, bearing the date of completion of the work in 1774. After the Revolution, the church was granted to the municipality, which undertook its restoration, and became a parish church by the name of Saint Nicolas. It features some superb 16th century baptismal fonts. Adjoining the church once stood the Récollets convent, construction of which began in 1629. The site today consists of the former presbytery, buildings now used as apartments and shops, and a public garden. Opposite the church is the current entrance to the chateau (which used to be opposite the Halle aux Blés).

Walk down the narrow Rue des Récollets and plunge into the narrow lanes of old Durbuy. As you descend, you will see ahead of you the impres-



Durbuy vielle ville

sive Omalius rock or Durbuy anticline. It is worth getting up close to the rock to appreciate its full impact.

You are now standing in front of the Durbuy Anticline, otherwise known as the Rocher de la Falize (Al Rotche al Falèye), also otherwise known as the Omalius Anticline in honour of the famous Belgian geologist Jean-Baptiste-Juliend'Omalius d'Hal-



loy(1783-1875). It was he, one of the pioneers of geology in Belgium and Northern France who, in 1807, first described the rock in a scientific journal. The anticline is a geological phenomenon, unique by virtue of its situation, its size and its ease of observation. So, now for a brief geology lesson. The Omalius Rock is what is known as an anticlinein geological terms. An anticline is an A-shaped fold in a rock layer. Its inverse, a V-shaped fold, is known as a syncline. It is made up of well-stratified Frasnian limestones. Going back in time to the Frasnian stage, between 385 and 375 million years ago, the Geopark lay beneath the southern tropic in a warm ocean. The ocean bed was made up of alternating deposits of carbonated mud and layers of reef-building organisms (corals, sponges, etc.), forming horizontal banks. In order to take on the folded appearance we see today, these banks had to be forced out of shape. This forcing occurred when the earth's crust was compressed. In Belgium, this happened when a mountain chain was formed some 320 million years ago (the Variscan orogeny). When the force of the

Belgian geologist d'Omalius d'Halloy (1783-1875) by Léo Herbo (photograph by Hubin, IRSNB). Alongside his brilliant scientific career, he also held senior administrative and political offices, such asgovernor of the province of Namur under the Kingdom of the Netherlandsand senator and first Vice-President of the Senate of an independent Belgium



The Durbuy or Omalius anticline

pressure became too great, the banks snapped. The resulting mountain chain was subsequently eroded away to a flat, featureless surface known as a peneplain. Rivers then incised their way into this rocky base to form the landscapes we see today.

Carry on along Rue Alphonse Eloy, the continuation of Rue des Récollets. After 70 metres, opposite the shop "Les Fantaisies de Maya et Melya", take a left into Rue des Récolletines. After 90 metres, opposite the "Au Vieux Durbuy" hotel, turn left into Rue Jean de Bohême. At the end of this street, turn left into Avenue Albert Philippart.

On your right, in the middle of the car park, you will find a dirt track that leads up the hill. When you reach the top, ignore the paths leading to the summit of the anticline and instead take the tourist path that makes a complete circle of thehill.

After 600 metres, you will see the anticline on your left. Instead of going in that direction, carry straight on towards the bridge over the Ourthe, taking Rue Derrière Clairval. Cross the bridge and then turn left into Rue de la Haie Himbe, where you will find the Parc des Topiaires and the car park where your car awaits.





Durbuy and the Ourthe Valley seen from the summit of the anticline

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Bureaux d'informations

Maison du Tourisme Famenne-Ardenne Place de l'Étang, 15 à 6900 Marche-en-Famenne (E T. : +32(0)84/34.53.27 - info@famenneardenne.be www.famenneardenne.be Ouvert du lundi au vendredi de 8h30 à 17h30. Ouv Place de l'Étang, 15 à 6900 Marche-en-Famenne (B) Ouvert du lundi au vendredi de 8h30 à 17h30. Ouvert les week-ends et jours fériés de 9h30 à 17h00. Fermé les 01/01, 01/11 et 25/12

Royal Syndicat d'Initiative Durbuy vieille ville

Place aux foires, 25 à 6940 Durbuy (B) -T::+32(0)86/21.24.28 & +32(0)86/21.36.17 info@durbuyinfo.be - www.durbuyinfo.be Ouvert en semaine de 9h à 12h30 et de 13h à 17h (jusque 18h pendant les congés scolaires belges). Ouvert le samedi, le dimanche et les jours fériés de 10h à 18h

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