

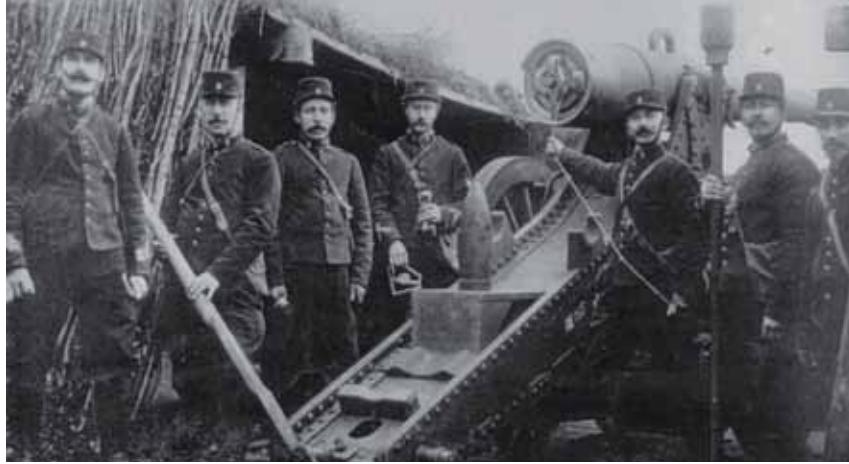


Villes et Pays d'Art et d'Histoire
County of Montbéliard
Discovery brochure

on the path to
the fort of **Mont-Bart**



The fort of Mont-Bart (1874-1877)



In the aftermath of its defeat in the conflict which opposed it to Prussia and Germany from 1870 to 1871, France found itself dispossessed of all of Alsace excepting the Territory of Belfort and a part of the Lorraine. In 1872 it set up a Defense Committee for the purpose of reorganizing the defense of all the borders, on both sea and land .

During the military engagements of 1870, the existing fortifications rapidly revealed their weaknesses: The fortresses would have to be adapted to the progresses made in the domain of artillery. General Séré-de-Rivières, promoted secretary of the Defense Committee in 1873, is at the head of the ambitious project which included the erecting of 160 forts, 43 lesser works and 236 batteries in France. The building of the fort of Mont-Bart was part of this plan of defense. Listed as a barrier fort, it was intended to function

in total autonomy in order to ensure its own protection as well as guarding certain passage-ways considered to be sensitive (roads, railway lines, stations, rivers, locks, bridges). The main reason for its construction was to protect the fortress of Belfort against any invasion coming from the south and to prevent it from being circumvented by passage through Switzerland. Together with the neighbouring forts of Mont Vaudois, of Lomont, Lachaux and the battery of Les Roches, it constituted the defensive Môle of Lomont, a veritable rampart with a potential of crossfire which ensured an ultimate resistance-line in the direction of Besançon should the defenses of the Trouée de Belfort capitulate.

Situated on a height of 485 metres, the construction of the fort took four years (from 1874 to 1877). This imposing military edifice is built entirely of stone, ex-

tends over 3.5 hectares and is pentagonal in shape, thus being able to afford an all-directional defense. This is further reinforced by two ditches, the first of which is still visible from the vantage point of the advance-post, while the second, more than 10 metres in width and depth, encircles the entire fortifications.

Over the years, the forts had to be adapted to adjust to the progresses made in artillery and the majority underwent numerous modifications to be able to offer sufficient resistance to the new explosives. The fort of Mont Bart is the exception: Apart from the roofing-over of the barracks buildings, it underwent no changes and is an authentic example of a fort of the type Séré-de-Rivières.

Having been abandoned over a long period, restoration on it has been undertaken in the last twenty years or so on the initiative of an association, l'Association du Fort du Mont-Bart with the support of the municipality and the Pays de Montbéliard Agglomération. It is open to the public and also offers a programme of cultural and leisure activities which take place during the summer months. Today the Pays de Montbéliard is in charge of the management of this site and wishes to make it a principal asset of the region's heritage.

The Barracks-Buildings

Concentrated at the centre of the fort, the barracks-buildings consist of two barracks separated by an alley-way - «la rue», («the street») - several tens of metres long, with 28 rooms located on two levels leading off from it where the simple soldiers and officers were billeted.

To begin with this street was open to the skies, but in 1914 however, in order to protect against possible attack by torpedo shells, rail-tracks were laid across it which were covered in concrete and reinforced by a thick overlay of earth. This addition was the main work of alteration carried out on the fort in order to modernize it and to reinforce the security of the soldiers and arms housed within.

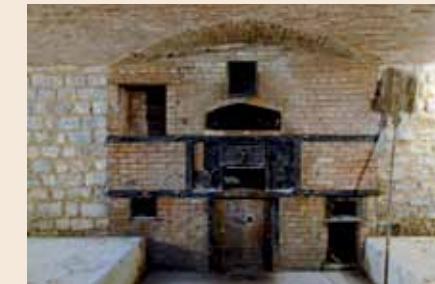


The bread-oven

Bread was a vital part of the soldier's daily ration. Several different types of bread could be distinguished: war-time bread (a long-lasting bread made with special flours), the «pain de munitions» or munitions bread – a round bread intended for the soldiers made with a mixture of rye and wheat-flour, and the «pain de soupe» or soup bread, a soft bread served daily by the kitchens.

At the fort of Mont Bart, an oven of the make Lespinasse made up part of the equipment of the kitchens. This model of oven was rarely found in the forts. Indeed it required two systems of fuel to heat the hearth, wood or coal. This equipment needed to be watched over constantly. If the oven broke down or was destroyed, there were two metal ovens on hand to replace it. The production from one batch was enough to prepare 300 rations or 150 loaves each weighing 1.5 kg. Indeed the garrison could contain as many as 700 soldiers. The bread was distributed to last several days and in order to ensure this, it was placed on boards suspended from the ceiling out of the reach of rodents. The «panetrie» or bread-store where the bread was distributed was located at the entrance to the bakery.

This oven has undergone some minor repairs and is today still in working order.



The chamber of lamps

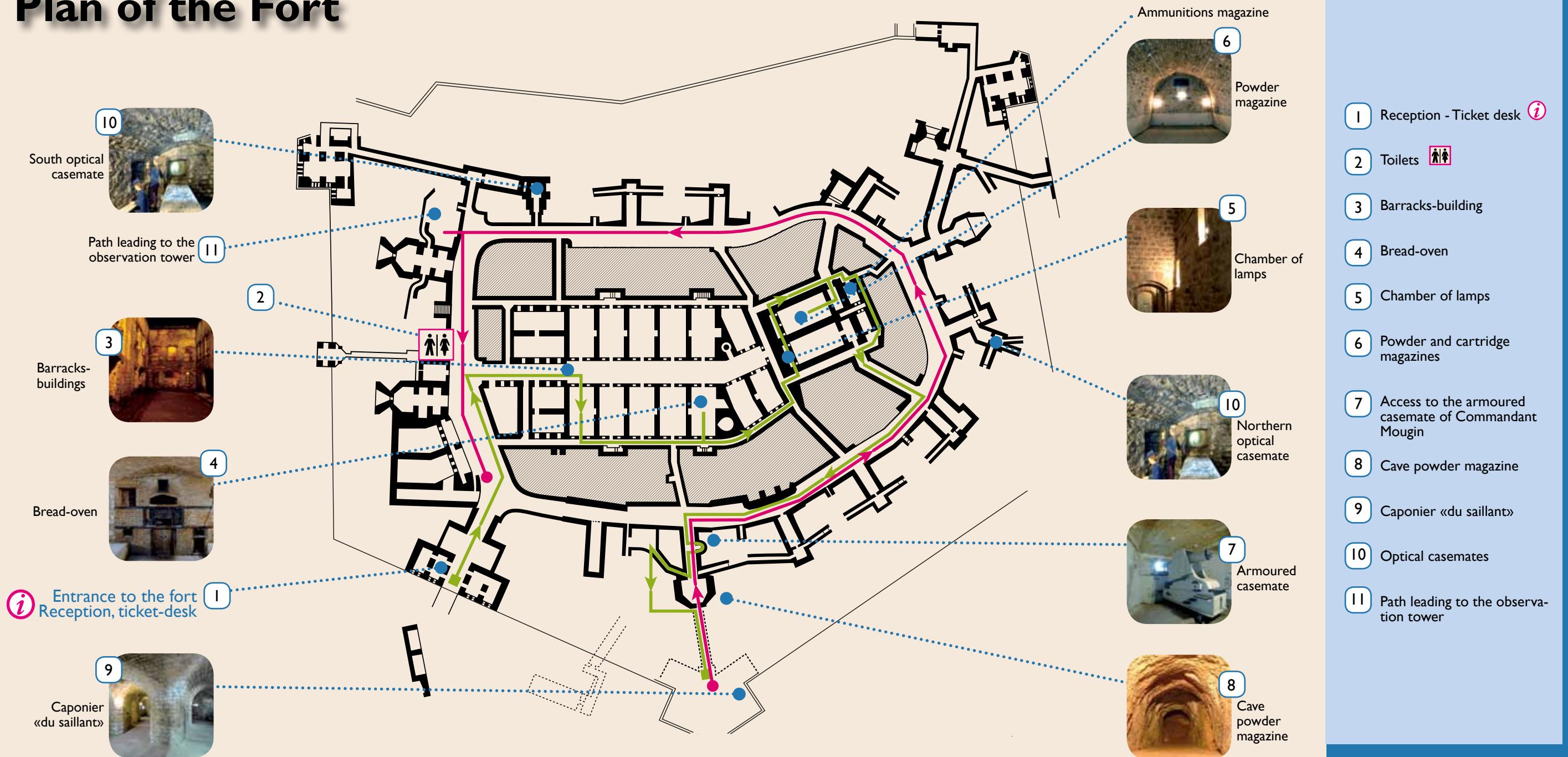
The storage of munitions and especially of gunpowder necessitated a complete system of security which extended even to the lighting system. In order to do away with all risk of explosion through contact with flame, lighting remained indirect.

The powder and ammunition magazines were lit by oil-lamps equipped with a reflector (similar to the disc of a locomotive) and placed in a separate corridor. Small openings made in the walls enabled the lamp-light to filter through glass panes 20 mm. thick which were protected by a grille in order to prevent them from being splintered accidentally by projectiles. The smoke given off by the lamps was evacuated by means of a chimney built over the room with a base tiled in white porcelain. This reflected the daylight and thus lent a certain brightness in the daytime.



Plan of the Fort

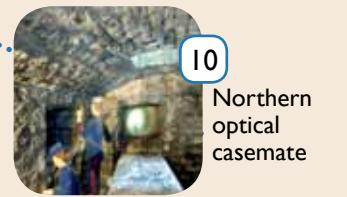
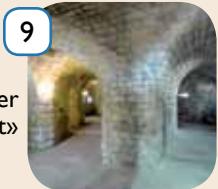
MONT-BART



11 Path leading to the observation tower



1 Entrance to the fort Reception, ticket-desk



- 1 Reception - Ticket desk
- 2 Toilets
- 3 Barracks-building
- 4 Bread-oven
- 5 Chamber of lamps
- 6 Powder and cartridge magazines
- 7 Access to the armoured casemate of Commandant Mouglin
- 8 Cave powder magazine
- 9 Caponier «du saillant»
- 10 Optical casemates
- 11 Path leading to the observation tower

The cave or underground powder magazine

The use of melinite as of the year 1885 to replace «la poudre noire» employed up to that time and the perfecting of the torpedo shell which possessed a considerable force of destruction made it necessary to reconsider the location of the powder magazines which were thereby rendered vulnerable and constituted a threat to the security of the fort. An underground powder magazine was built in 1889, hollowed directly out of the rock and descending about 15 metres thus reducing the risk of explosion to a minimum. This risk was further reduced by the fact of its being located at a distance from the centre of the fort on the far side of the ditch. To supply the

ammunition, a system of small wagons on rails connected to an elevator ran directly from this bunker to the artillery room.



The armoured casemate of Commandant Mougin

In 1882, Commandant Mougin, former aide de camp of General Séré-de-Rivières who was charged with the reinforcement of defenses perfected a prototype of a casemate (an artillery-proof vaulted chamber) which was conceived to be indestructible. Only 10 examples of this type of armoured casemate were included in the equipment of the forts of Séré-de-Rivières.

This marked the beginning of a new era in armoured protection: in addition to being extremely resistant, this casemate was also simple and easy to operate. With a 12 metre long corridor leading to it, the artillery-room was trapezoidal in shape and characterized by its ceiling armoured with plates of cast iron. Facing eastward, the casemate is armed with a long barrel Bange canon placed on a pivotal higher mounting of which we can admire a life-size model today. The purpose of this casemate was to prevent access to a main artery (road, rail or other) by means of

its canon which enabled it to fire 42 kg shells 9 km. in the direction of Montbéliard, beyond Fort Lachaux on the Trouée de Belfort.

While the casemate was lit by candles, the firing process was electric.

So that the casemate remained protected from enemy-fire while the canon was reloading, an ingenious bolting system shot a bolt across the opening. Though weighing 7 tons, it could be raised from the inside manually without difficulty thanks to a system of counterweight.



Model of the canon built by the Centre des Métiers du Patrimoine.

The powder and cartridge magazines



The stocking of powder and munitions was an essential element of the defense of the forts. This was restricted to well-defined areas and effected without losing sight of the major preoccupation of protecting these at once from enemy attack, from damp and the risk of sparks. The Mont Bart fort houses two arms magazines in which it was possible to store roughly 390 000 cartridges and two powder magazines which could contain up to 110 000 kg. of powder. These reserves were sufficient to provide ammunition for about fifty guns.

These rectangular vaulted rooms have sprung floors and there are small openings made in the walls to allow adequate ventilation forming an envelope to ensure dryness.

Apart from the indirect lighting, other precautions were taken to protect against the risk of sparks, thus metal fixtures subject to friction such as hinges, locks and grilles were made of bronze or copper. Furthermore, only certain soldiers had access to these areas and were supplied with «chaussons» (special sandals or clogs without nails to avoid any sparks). Finally, a vestibule led to the powder magazines where the distribution was effected.

The caponiers

The caponiers are veritable forts in miniature built at the external corners of the fort with the specific purpose of protecting its ditches and of keeping them from being occupied in any manner by the aggressor.

They are referred to as «simple» when they dispose of one sole firing azimuth and «doublé» when they can defend two portions of the ditch.

The fort of Mont Bart stands within these four caponiers situated at each of its extremities: south, north, east and west.

The east caponier known as «du saillant» because of its bulging shape similar to that of the ace of clubs, is without doubt the most representative of these. Being doubled, it could flank in two directions. It originally contained a powerful armory consisting in two revolver canons and two «canons de 12 à culasse» (light canons with breech). Standing side by side in the extension of the ditch to be defended, the fire-power of these weapons was devastating.

The caponiers of the fort of Mont Bart constitute remarkable elements in terms of the historical heritage for they have disappeared from the most modern forts to be replaced by «coffres de contrescarpe» (small concrete bunkers built in the outside wall of the ditches to which one gained access via a protected traverse) following on the advent of the torpedo shell which rendered the former too vulnerable.



Optical casemates

The means of communication at the time the fort was constructed was confined to transmission by carrier pigeons and optical telegraph. In 1886, a ministerial decision placed the fort at the centre of communications for the southern zone. Together with others it was listed as the command network for optical and electrical correspondence. For this purpose two casemates were built in the protected traverses to house the post and the signal operators whose mission was to send and decode messages. The north casemate afforded communication with the Fort of Mont Vaudois (Héricourt), of Salbert and Lachaux (Montbéliard). The south casemate was linked with the forts of Lomont, of La Dame Blanche (Besançon, Chailluz forest) and the Batterie des Roches (Pont-de-Roide). The telegraph made it possible to establish liaisons with forts located up to 70 kms. away either by day or night, excepting in foggy weather. The equipment took the form of a single wooden box containing an oil-lamp, lenses for concentrating the beam of light, a hand operated shutter and a

sighting telescope for picking up the correspondent. The system is based on the use of a source of light (whether natural like the sun or artificial: acetylene or oil lamp) combined with



lenses and mirrors to concentrate the light into a beam. A code was agreed on in advance so that the messages sent could be decoded. The message was received by means of a sighting telescope. The transmission terminals created at the time can still be viewed today, likewise, the access to the heliostat chimney which is still in possession of its ladder for installing the device at the summit of the casemate. A brick dividing wall marks the area in the south casemate where the pigeon cages were kept as part of a back-up system.

The optical telegraph is used until the arrival of the electrical telegraph later replaced by the wireless and finally by the telephone.

The observation tower

An observation tower, known as «cavalier» was installed at the summit of the fort. Originally covered in shrubs which enabled it to blend into the surrounding countryside and the green of the forest of the Mont Bart.

From this vantage point the visitor has a round view over the County of Montbéliard. From this height he can observe the different structures pertaining to the fort, from the Parados to the artillery-platforms, taking in the earthen embankments, over the underground tunnels and the parapets for the riflemen.

A view-point indicator provides the principal elements for understanding the site, indicating not only the geographical landmarks but also the position of the friendly forts.



Service in charge of activities related to the Heritage

This service of the Pays de Montbéliard Agglomération has the role of implementing the convention «County of Art and History» signed between the Pays de Montbéliard Agglomération and the ministry of culture and communication. It organizes numerous actions which offer to the inhabitants both young and adult as well as to visitors the opportunity to discover the heritage of the County. It associates with the schools in their teaching projects on the theme of heritage.

Let us tell you the story of the County of Montbéliard, rich in its art and history...

in the company of an experienced tour-guide approved by the Ministry of Culture and Communication

The guide is on hand to welcome you. He knows every facet of the County of Montbéliard and can provide you with the essential elements to understand a building or landscape, or the development of a town from one district to another. The guide is at your disposal. Don't hesitate to ask him your questions.

If you are a group

The Tourist Office proposes visits all year round on reservation only. Brochures providing information can be sent you on request. The visits can be conducted in English, German, Italian and in sign language. Information from the Tourist Office.

Information

Service organizing events and actions around Heritage

Pays de Montbéliard Agglomération

8 avenue des Alliés - BP 98407

25208 Montbéliard cedex

Tel : 03 81 31 87 80 / Fax : 03 81 31 84 89

animationdupatrimoine@aglo-montbeliard.fr

www.patrimoine-pays-de-montbeliard.fr

Tourist Office of the Pays de Montbéliard

1 rue Henri Mouhot

25200 Montbéliard

Tel : 03 81 94 45 60 / Fax 03 81 94 14 04

accueil@paysdemontbeliard-tourisme.com

www.paysdemontbeliard-tourisme.com

Opening hours and tariffs

Open from May to October from 14.00 to 18.00

In May, June and September : on Saturdays, Sundays and holidays

In July and August : every day except Monday

In October : on Sundays

Admission fees :

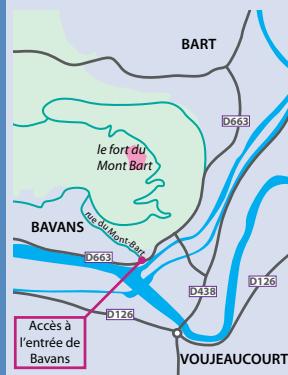
-Adults: 3 €

Groups (minimum of 10 people): 2 €

Young people from 12 to 18 (individual or groups): 1 €

Discounted admission fee for teachers, students, unemployed, senior (over 60), veterans, disabled visitors, "Pass Tourisme" holders: 1 €

Free admission for children under 12 (individual or groups), school groups (nursery school, college, high school, university) including supervisors.



Guided tours for groups by appointment only: contact the Pays de Montbéliard Tourist Office at: 03 81 94 45 60 or accueil@ot-pays-de-montbeliard.fr

The fort can be closed occasionally for maintenance works or in preparation for an upcoming show.

The Pays de Montbéliard belongs to the national network of Villes et Pays d'art et d'histoire (towns and counties rich in art and history)

The ministry for culture and architecture, Director of architecture and the Heritage, grants the appellation «Ville ou Pays d'art et histoire» to the local authorities which organize actions related to the heritage with professionals. It guarantees the competency of the event-organizers as well as the quality of their actions. These towns and counties bring to life the diverse facets of the heritage whether in architecture or landscape... Today, a network of 149 towns and counties across France offer you their know-how.

Close by,

Autun, l'Auxois, Besançon, Chalon-sur-Saône, Cluny, Dole, Guebwiller, Langres, le Val d'Argent and the Pays du Revermont have also been granted the appellation Villes et Pays d'art et d'histoire.

Texts adapted from the writings of Pierre RICHARD

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