

## The history of the museum

THE FOSSIL AND LITHOGRAPHY MUSEUM evolved from the "Museum auf dem Maxberg" which celebrated the 75th year of its existence in 2004 and which is regarded as the oldest museum of its type in the local area. The change of location to Gunzenhausen in the middle of the popular "Fränkisches Seenland" recreational area brings the museum with its many valuable exhibition pieces and fossils from all over the world closer to a wide audience.

THE MUSEUM WAS BORN in 1929 when Alphons L. Zehntner, the son of a lithography stone trader from Munich, was appointed the general director of the Solnhofen Aktienverein. He granted interested visitors free entry to his extensive collection of fossils. On the occasion of the 30th anniversary of his service, he fulfilled his wish to present his collection in a museum. A non-profit-making association was set up with the objective of establishing a museum open to the public on the Maxberg. This museum opened on 30 May 1959. The museum's collection is to this day esteemed by renowned experts, students of geology and palaeontology and schoolchildren as a popular and recognised forum for building knowledge.

## Visitor attractions

**Alternating special exhibitions, practical lithography presentations and informative multimedia presentations make even repeat visits to the new Fossil and Lithography Museum a real experience!**

**You can prepare your own fossil – our workshop which allows you to prepare fossils under expert supervision is a particular attraction for our visitors during the summer months.**

**The museum shop offers a wide selection of single-colour and multi-colour lithographs, specialist literature, postcards and fossils. We are looking forward to your visit!**

## Fossils - from all over the world

FOSSILS FROM ALL OVER THE WORLD, mainly from the Upper White Jurassic – the malm – are on show at the Fossil and Lithography Museum.

They were formed towards the end of the Jurassic period, around 150 million years ago. On the edge of and to the north of the then Mediterranean Sea comprising an area of shallow water stretching roughly to the Alpine region which at this point flowed into the deep sea, extremely fine lime slurry was deposited in

shallow, lagoon-like hollows separated from the open sea predominantly by coral reefs. With the course of time, this hardened and turned into plate lime. At that time, the land was slowly sinking and thus lime slurry was able to be deposited on the bottom of the lagoons again and again. In this way, strata complexes ranging from a few to more than 50 m in size were formed, depending on the depth of the lagoons. When storms occurred during the monsoon season (it must be imagined that a

subtropical climate prevailed here at the time), all types of marine creatures were washed into the lagoons and sooner or later died in the slack-water conditions owing to the falling oxygen content and increasing salt content of the water. After a certain drift time, they sank to the bottom where they were subsequently covered by a second layer of lime slurry and then with time became fossilised. However, land animals of all types and creatures inhabiting the air were also swept into the

lagoons during storms where they drowned and suffered the same fate as the marine creatures.

THE FACT that the Solnhofen fossils became so famous throughout the world can be attributed to the fact that the creatures which died in the lagoons were mainly embedded in the lime slurry when the water was calm. The finest details including soft parts were therefore preserved and nowadays offer scientists a reliable basis for their research.

## Fossils - from all over the world

We show original excellently preserved and, at the same time, rare pieces of marine and land creatures from all over the world which, as regards the Solnhofen fossils, lived approximately 150 million years ago. These are all ordered – from jellyfishes to the highly developed pterosaurs. The development of the creatures is likewise illustrated. Specimens and models of "recent creatures", i.e. relatives of the fossils which still live today and which have hardly changed or not changed at all when

compared to their early relatives are extremely interesting and are specially marked.

CASTINGS OF VIRTUALLY all hitherto known archaeopteryxes are on show in two display cases. The "Berliner Exemplar" specimen is particularly worthy of note. Werner v. Siemens made it possible to buy it for the Humboldt University in Berlin in 1881. It is the most impressive and, at the same time, most complete specimen.

*Orthocormus cornutus, Bony ganoid*  
105 cm



*Palaeocarcharias stromeri, Shark*  
81 cm



*Pseudorhina alifera, Squatinid, 117 cm*



*Holophagus penicillatus, Tassel-finned fish*  
42 cm



*Fossil from Libanon*  
10 cm



*Scaphognathus crassirostris, Large flying dinosaur*  
29 cm

*Archaeopteryx lithographica, Urvogel, Berliner Exemplar*



*Ammonit, 19 cm*

*Gyrodus sp., Ball-toothed fish*  
112 cm

*Ophiopsis, Bony ganoid*  
20 cm



*Turtle*  
29 cm



*Priscacara liops Sonnenbarsch, 13 cm*  
Fossil from Wyoming/USA



*Ischyodus avitus, Male ratfish*  
76 cm



## The fossil department

AS A PARTICULAR ATTRACTION, the Fossil and Lithography Museum shows the casting of a skeleton of a PLATEOSAURUS measuring more than 7 metres long. The plateosaurus was predominantly a herbivore.

Dinosaurs also lived in the local area too. During excavations in Ellingen, the skeletons of plateosauruses among others were found.



View of Room 3:  
Fossils from all over the world

SHORT GUIDE



# Fossilien und Steindruck Museum

previously Maxberg-Museum



*Plateosaurus*  
Dinosaur  
7 m



*Caturus* cf.  
*macrurus* Ag.,  
Bony ganoid  
29 cm



Fish with scaly coloured dress, 31 cm



Lithography  
Stone etching  
Stone engraving  
Construction



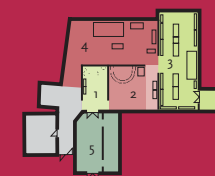
*Cymatophlebia*  
*longialata*,  
Dragonfly  
14,5 cm



*Cyclerion*  
*propinquus*,  
Reptantia  
12 cm



*Leptotheutis* gigas,  
Cuttle fish  
121 cm



Visit the new and unique Fossil and Lithography Museum in Gunzenhausen. It shows fossils from all over the world and documents the palaeontological, cultural and historical importance of the Solnhofen plate lime.

# Lithography

STONE PRINTING OR LITHOGRAPHY – the basic form of today’s offset printing is one of the focuses at the museum.

In 1798, after many years of trying, Alois Senefelder invented a new printing process called flat printing using Solnhofen plates. This signalled the beginning of a new era of “black art”. The principle is “relatively simple”: Solnhofen stone absorbs water and fat; however, water and fat repel

one another. If a drawing is now made in fat-containing ink or chalk on the stone which has been ground so that it is completely flat or grained, and the remaining area subsequently moistened, only the drawing absorbs printing ink upon rolling and the moistened area repels it. This invention revolutionised printing in many areas. For example, music which had previously been engraved in copper could now be produced in principle between 30 and 50% more



# Exhibition

cheaply. Even in the early days of flat printing, this invention made simple illustrations possible (i.e. affordable), even in schoolbooks. This promoted the passing on of knowledge and soon contributed to increasing the level of public education.

Technical knowledge made it possible for Senefelder to develop the necessary presses (rubber presses) for the new printing process. Platen presses (letterpress printing) and copperplate presses with

which he initially tried to work proved unsuitable.

A total of 6 compression presses are shown in the museum. 3 of these (all replicas) were devised by Senefelder himself: a copperplate press with which Senefelder printed the first music in 1796, the bar press and the table press.

Furthermore, cradle books by Senefelder and his contemporaries, the necessary equipment as well

as valuable originals by world renowned artists (including Salvador Dali, Daumier, Gavarni, Toulouse-Lautrec, Marc Chagall, Käthe Kollwitz, Zille, Kokoschka, Miró, Delacroix and Picasso) can be seen.

View of Room 2: Building stone past and present The Roman fort baths (section of the original reconstruction)



Star-type lithographic press



Large rapid lithographic press

View of Room 4: Lithography The copperplate press and the bar press can be seen



Practical lithography



Senefelder's first music print: "Feldmarsch der Churfürstlichbayerischen Truppen" produced in 1796 using a high-pressure process



1. Alois Senefelder (1771-1834)

We would be delighted on request to present the practical aspect of "printing from stone" to interested visitors for a fee.

On every 1st Sunday of the month in the months April to October, from 11.00 – 12.00, visitors to the museum can watch lithography being carried out free of charge.

Lithographs, some of which were printed on the presses exhibited in the museum, can be purchased in the museum shop.



A selection of special exhibits in our lithography section:

1. "Senefelder" chalk lithograph (Hanfstaengel)
2. "The Horses" (10-part lithographic series by Salvador Dali) From left to right: "Don Quichotte", "The Trojan Horse", "The Picador".
3. "The Beautiful Fountain", Nuremberg
4. "Profil im Oval" (Paul Wunderlich)
5. "Les canotiers parisiens" (Daumier)
6. "The Enraged Cow" (Toulouse-Lautrec)
7. "The Green Letter" (Miró)

Title image (extract): "The Blue Fish" (Chagall)



2.



5.



6.



7.

**Stone etching,  
Stone engraving  
and bas reliefs**

MAINLY SOUTH GERMAN ARTISTS of the late Middle Ages worked with this fine-grained and hard material from the Solnhofen area. Medals, lettered plaques, low reliefs and other varied artistic pieces of work have been produced in this way to this day. Impressive works of this type can be admired in the museum.

Low relief plaque,  
around 1600



Imperial Hall of the  
Ottobeuren Monastery



**Solnhofen  
stone in  
construction**

EVEN ALMOST 2000 YEARS AGO, the Romans were aware of the favourable properties of Solnhofen stone. Around 200 AD, a bathing pool of the limes fort near Theilenhofen was therefore provided with a base lining and wall lining made of slabs from the quarry area around the Schwartzberg. The accurate reconstruction using the excavated original floor is a particular attraction of the museum. The working model for the floor of the Imperial Hall of the baroque Ottobeuren Monastery is just one example of the way in which the Solnhofen slab has been held in high esteem through the centuries and as far as the present day.



Patrona  
Bavariae



Bovius  
Sundial

**Visitor information**

[www.fossilien-und-steindruck-museum.de](http://www.fossilien-und-steindruck-museum.de)

**Directions**

The Fossil and Lithography Museum is located in the town centre of Gunzenhausen – in the middle of the “Fränkisches Seenland” local recreational area. Favourably located in travel terms in the catchment area of Nuremberg, Ansbach and Weißenburg, Gunzenhausen can easily be reached by road and rail. Please follow the signs in the town centre.



**Address**

Sonnenstraße 4, D-91710 Gunzenhausen,  
Telephone and fax ++49 (0) 9831/ 88 26 55

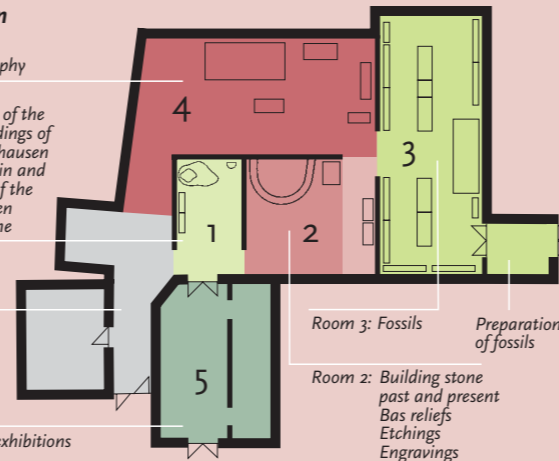
**Museum Plan**

Room 4: Lithography

Room 1: Geology of the surroundings of Gunzenhausen  
The origin and spread of the Solnhofen plate lime

Entrance  
Cash desk  
Management  
Social rooms  
Disabled WC

Room 5: Special exhibitions



Room 3: Fossils  
Preparation of fossils

Room 2: Building stone past and present  
Bas reliefs  
Engravings

**Imprint**

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**SHORT GUIDE**



**Fossilien und  
Steindruck  
Museum**

previously Maxberg-Museum



Eomesodon, 36 cm

**Fossils  
from all over  
the world**



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