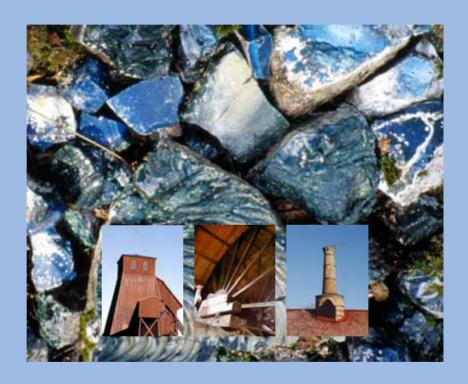
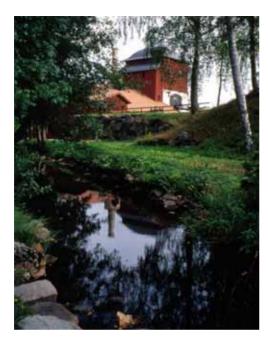
## Old Pershyttan Mining Community









## Cultural Heritage Site Old Pershyttan Mining Community

© Örebro County Administrative Board 2007 Original Swedish Text and Layout: Elisabeth Karlsson and Margareta Hildebrandt

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Museum's Photo Archive

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#### Old Pershyttan Cultural Heritage Site

Old Pershyttan is a well-preserved mining community characterized by mining and iron-production from the 1300s until the present day. In December 2004 the regional government declared Old Pershyttan a cultural heritage site, the first of its kind in Örebro region.

Pershyttan is a unique reminder of Bergslagen's golden age. Here it's still possible to see the connection between natural resources – ore, forest and running water – and iron production at the foundry. No other mining community is so well-preserved. There's the foundry and the workers' housing, mines, industrial remains, transport system, a mechanical water system, individual buildings and original settings. All of these elements, seen together with the surrounding countryside, show us how mining and iron production affected the landscape between the middle-ages and mid-1900s. As well as being able to trace the development of Swedish mining, one can also see what living conditions were like for people in mining and iron-producing communities.

#### **Cultural Reserve**

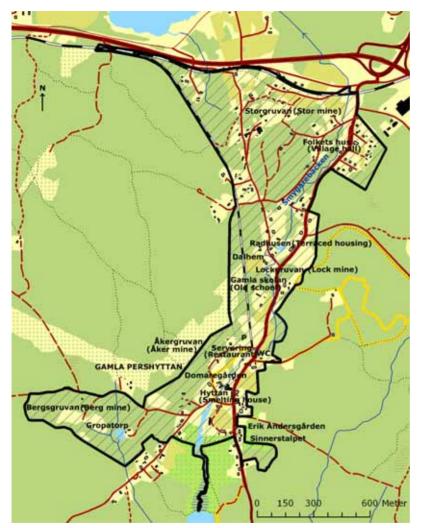
Environmental regulations, which came into force in 1999, now provide an additional level of protection, making it possible to preserve areas of exceptional cultural significance. Heritage sites will enable future generations to understand how modern-day society has evolved and how past generations utilised the land. These sites will help by providing a more in-depth understanding of Sweden's historical heritage.



Please note:

- Removal of the bluegreen slag-stone is not permitted, it makes up part of the historical remains.
- Most of the dwellings are private property – please show consideration!





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The heritage site covers 128 hectares. In the long term around 60 industrial buildings will be given a face-lift; old stone foundations will be cleared of undergrowth and the landscape opened up. This has been laid out in an action-plan, although the majority of buildings here are privately-owned and thus not covered by the plan.



The remains of a turning gear, the point at which the beam drive changed direction

Man utilises and influences nature. The landscape is forever-changing.

Left: stone foundations of a demolished foundry. Right: parts of the foundry's slag pile.

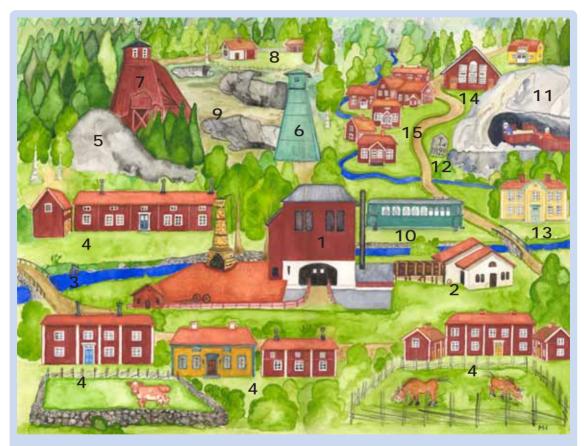
#### Traces in the Landscape

Old Pershyttan reflects 700 years of mining in a Bergslagen community, a mining community which was, for a long time, of great importance to Sweden's economy. The mines exhibit traces of several excavation techniques from various centuries. Industrial remains illustrate the various activities which were carried out here. The buildings demonstrate for us how the community has evolved, from a small-scale to industrialised mining community and finally into an area of privately-owned homes whose residents work elsewhere.

Slag piles, charcoal beds, the remains of small tenant farms and old overgrown pastures and gardens – each reveal something. In traditional mining communities, farming and mining complimented each another. It was, however, the demands of mining that dictated how the land would be utilised. Many work-animals were needed for mining and, as a result, much of Pershyttan's land was used for grazing.

The land within the cultural reserve should reflect not only human activity from the past but should also leave space for the future.





- Smelting house 1
- Water wheel and beam drive 2
- 3 Smygarebäcken stream
- 4 Miner-shareholders' manor-like residences (from the 1700s and 1800s)
- 5 Gråberg's tip
- 6 Åker mine's shaft head (from 1917)
- 7 Stor mine's shaft head (in use until 1967)
- 8 Mine-worker's croft at Stor mine

- 9 Mines (the oldest at 700 years old)
- 10 Restaurant carriage Lock mine
- 11
- 12 Slag pile
- 13 The old school-house (1849-1966)
- 14 Village hall (from 1931)
- 15 Housing for mine employees (early 20th century)

# December





### A Year in the Life of a Mining Community

#### Winter

Winter was time for transporting. Ore and charcoal were drawn by sled over snow and frozen lakes. The furnace was prepared for firing and the miners took turns using the furnace throughout winter and spring.

#### Spring

Spring was time for farming; time to plough and sow, put the animals out to pasture and repair the fences. Each spring the blast furnace was blown out, and this was celebrated with food and drink, games and dancing. In the forest, trees were being felled for autumn's charcoal piles.

"One's own children, even one's wife in most places, are involved in the business of mining."

Erik Bergenskjöld, Nora Bergslag, 1784 year's end.







#### Summer

Summer was time for mining, difficult work which the miner-shareholders carried out by themselves. Traditionally the entire household helped out but seasonal workers were later brought in. August was time to make hay and gather leaves from the trees for winter fodder.

#### **Autumn**

Autumn was time for charcoal production in time for the firing of the furnace. Autumn was also a time for harvest; all the crops would be reaped, dried and threshed.

"In summer, son and daughter cross paths in the mines and in winter they do their duty at the foundry as one's wife loads the furnace with ore to produce iron for the city. For this reason the miners were not available for work in the mines in winter, even if the snow and ice were not a hinder in themselves."

Erik Bergenskjöld, Nora Bergslag 1784 year's end.





September



August



July



The blast furnace and charcoal store around 1900.

"An old-fashioned kind of blast furnace situated around 5km from the town of Nora."

Erik Bergenskjöld, Nora Bergslag, 1784 year's end.

#### Pershyttan's Foundry

Sweden's prosperity was partly due to Bergslagen's iron. By the mid 18th century Sweden was responsible for a quarter of Europe's iron production, iron which came from hundreds of small foundries in Bergslagen.

In Pershyttan, iron has been produced since the middle-ages. The foundry has probably always been in same place, at Smygarebäcken. The current layout was introduced in 1856 and includes roasting furnace and charcoal-based blast furnace etc. Today, the foundry remains exactly as it was following the final firing in 1953, complete with equipment etc. At the smelting slope part of one of the large charcoal stores can still be seen.

The mining community was characterised by the fact that ownership of the foundry was shared between several members of the mining district. In the beginning of the 17<sup>th</sup> century there were four shareholding members. At its peak, in the 19<sup>th</sup> century, the foundry had seventeen interested parties; some being miners from other mining districts.

#### Industrialisation

The miner-shareholders' age ended in 1860. Pershyttan was then converted to an industrial mine. Kil and Ramshytte mineowners' ran the foundry between 1887-1907. For a few years, the business was owned by Lars Larsson of Bredsjö. In 1918 AB Pershyttan, established in 1910, was taken over by the Johnson group and Avesta Jernverks AB. Iron production ceased in 1953 and in 1986 the foundry and most of the industrial remains were taken over by Nora Railway Museum and Veteran Railway Association.



Crushed ore, lime and charcoal are poured into the upper part of the blast furnace. The molten iron is tapped out at the bottom, flows through a channel out of an opening and into mudlined pig- iron casts.





#### Water's significance

The stream determined where the foundry would be built as the running water was utilised at every stage of the process. Huge water wheels spun and powered blowing bellows in the blast furnace as well as beam drives, which pumped ground water up from the mine shaft. The mill and saw were also powered by the stream. The force of the water was harnessed and regulated using dams and canals. In the 1900s the water was piped to a power station generating electricity.

Some of these structures can still be seen today i.e. parts of the water pipes, a couple of water mills with large water wheels, and part of a beam drive. Only the foundations of other structures remain. There are, however, traces of hundreds of years of activity and development to be found all around.





Buildings crowd tightly around the stream.

Left: a glimpse of the foundry and the Domargården residence.

Right: the mill and in the foreground remnants of the saw.



Lock mine is open to the public.

#### The Mines

Pershyttan's mines are among the oldest in Bergslagen. The blast furnace technique was developed during the middle-ages and then excavation of iron ore from rock began. From the start, it was the miner-shareholders and their families who were solely responsible for the mining. At the time, they used an ancient method which involved heating up the hill by lighting large fires. Then, when the hill cooled down it cracked.

At one time, the mines were divided up into eight mining districts. In the middle of the 19<sup>th</sup> century they merged together into three districts; the northern mines at Stor mine, Lock mines in the middle, and the southern mines around Åker mine. In 1867 all of the mines were put together under Pershytte Grufvebolag. From 1918 this company was owned by Avesta Jernverks AB. Mining continued until 1966 at Åker mine and until 1967 at Stor mine. Both shaft heads still tower over the mines.



Åker mine's shaft head.

#### The Buildings

The community grew up around the foundry and along the stream. Closest to the foundry lived the miner-shareholders. Their manor-like residences from the 18<sup>th</sup> and 19<sup>th</sup> centuries proclaim relative wealth and status and can be further distinguished by their crowned chimneys. The mining and charcoal workers lived in crofts on the outer edges of the community, most of which were abandoned a long time ago, although some still exist to this day.

Further downstream are buildings from the 19<sup>th</sup> and 20<sup>th</sup> centuries. Here, farm buildings and housing built by the mining company compete for space. The last 'company-housing' was terraced housing built in the 1950s. There was still a flurry of activity then, with children in the school and meetings and dancing in the village hall.

Left: Domargården. Above right: 1950s terraced housing. Lower right: wheel house.









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