



## Sloss furnaces, United States

The Sloss Furnace Company was established by Withers Sloss in Birmingham, Alabama, in the aftermath of the American Civil War, to exploit the local ore, limestone and coal. Sloss City Furnaces were 'blown in' in 1884, and by the First World War, it was a vertically integrated site and one of the world's leading producers of merchant pig iron. In the 1960s and 70s, the introduction of ductile and plastic pipe and the growing dependence on scrap iron, stricter air pollution controls, and foreign competition undermined the American smelting industry. Closed in 1971, Sloss escaped demolition and was donated to the city in 1977, and became a National Historic Landmark in 1983. By 2000, most of the historic structures on the sites have been stabilised. Parts of it have been adapted for community and civic events, and for an innovative metal arts programme. Sloss holds concerts, festivals and conferences, workshops and exhibitions of metal arts in the large casting shed.

Concern about the direction of Sloss Furnaces led to a large public consultation process, that set new goals for Sloss since 1998. These are improving the partnership between the site and local schools, developing an infrastructure of classrooms and teaching programmes; a preservation programme focusing on the stabilisation of the historic N° 1 furnace; the construction of a Visitor Centre, with exhibitions, teaching facilities, and a shop; improving the former casting shop's capacity and attractiveness for public performances; and enhancing the metal arts programme, of artists working with and demonstrating the iron-making process. Sloss is now used to demonstrate to students and other visitors how scientific theory can be applied to the realities of industry and everyday life. Visitors encounter lessons from history, economics, sociology, physics, chemistry, and the arts. The lessons are real and their application immediate and practical. With first-hand oral testimony of activities and incidents, the working of the site can be brought to life. Background sounds will give a better sense of it working. A section of worker's housing, Sloss Quarters, will be reconstructed to celebrate the trades which operated the works.

Sloss's funding has previously been from the City of Birmingham, and the new project there aims to match this with private sources to raise \$10 million. By helping people form new attachments to the old furnaces, these programmes keep Sloss

an active and important part of the community, as it was for almost 100 years previously.

*Thanks to Dr Robert R Rathburn, Executive Director of Sloss Furnaces, for the information in this article*

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## TICCIH News

### From FICCIM to TICCIH2000

Dr. Barrie Trinder was not only the chair of the academic panel of the London congress, but also joint organiser of the First International Committee for the Conservation of the Industrial Monuments, FICCIM, in Ironbridge in 1973. His reflections on the contrasts between the two meetings, on changes in attitudes toward industrial heritage, and on achievements since 1973, can be found in an article specially written for the TICCIH web page [www.museu.mnactec.com/TICCIH/](http://www.museu.mnactec.com/TICCIH/).

### Bulletin correspondents

The Editor is looking for members in different countries to act as 'Foreign Correspondents' for the Bulletin, to improve and extend the coverage of industrial heritage in their areas. This is especially needed outside Europe, but a regular supply of news on new initiatives, projects, conferences, meetings, depressing threatened sites or uplifting achievements of industrial conservation would be very welcome from any reader able to send a short note every three months or so. The only stipulation is that it arrive by e-mail, and that it is written either in English or in an unsophisticated French or Spanish.

### More American elections

One piece of information that was mislaid in the last issue was that Patrick Martin has been acting as the TICCIH representative in the United States, after Dennis Zembala stood down at the end of last year. The American National Representative is chosen, in an exemplary democratic manner, by an election at the annual meeting of the Society for Industrial Archaeology

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(SIA), which will be held in May, 2001. Calls for nominations have been made for someone to serve for a three-year period. Perhaps this is a model for choosing the TICCIH representative that other national societies might follow.

### **Membership payment by VISA**

Since the change in TICCIH's status to that of a charitable trust, it has been possible to pay membership fees to join or renew membership by credit card. The TICCIH web page now has an on-line membership form with which payment can either be made directly, or by printing the form and sending it by fax. Applications from eight new members were received since the form went on line, three in Canada, two in Germany, and one each in France, Turkey and Spain.

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## **Report**

### **Issues in the conservation of iron and steel works: The project for the creation of the 'National Mining and Metallurgical Park of the Middle Urals' - results of 1998-99**

The Urals is one of Russia's oldest and largest industrial regions. In 2001, its story will finish its third century. The diversity and richness of the monuments of industrial culture concentrated here encouraged the idea of whole works conservation and turning into museum objects as early as the 1990s. One of such projects is the National Mining and Metallurgical Park of the Middle Urals. It was conceived as a report made by Nizhny Tagil Museum-Reserve's director, I G Semionov and the author at the TICCIH conference in Athens in 1997.

The Park is a complex project, aiming at a parallel solution to the following tasks:

- Architectural rehabilitation and reconstruction of the towns' historical centres.
- Conservation and elaboration of new varieties of utilisation of the industrial, historical and cultural monuments.
- Ecological rehabilitation of the above territories.

Actually, in 1997 the project was one of a number of proposals more or less substantiated in respect to the monuments' value, but not being sufficiently financed and co-ordinated with either local authorities or industrial enterprises.

What has been done for the realisation of the project within three years?

It took the second half of 1997 and the whole of 1998 to solve the financial and administrative problems. By 1999, the municipalities of Nizhny Tagil, Kushva, Neviansk, Verkhnya Salda had authorised the creation of industrial-landscape parks on their territories and made the decision to include them in the structure of the future National Park. They also sponsored the project. At the same time, the Sverdlovsk region governor issued an 'Urgent measures for conservation of the industrial and cultural-historical heritage of Sverdlovsk Region'. Finally, and most important, was the presentation of the Park project to the Minister of Culture of the Russian Federation in Spring 1999. Invaluable assistance was provided by the TICCIH President, Professor Louis Bergeron.

As a result, by summer 1999, a many-level system had been established: federal government-regional government-local authorities-industrial enterprises. A parallel system of scientists and designers working at the Park's project had also been created. They represented Nizhny Tagil Museum-Reserve, other local museums, the Ural Academy of Architecture and Arts, and the Ural branch of the Russian Academy of Sciences. In 1999, a full-scale investigation and design project was conducted. The year's results have been summed up and published in a special edition (only in Russian) 'The National Mining and Metallurgical Park of the Middle Urals: Zoning, Monuments of Industry, Architecture, History and Culture, Museum Construction'.

#### **What has been done?**

Complete inventories and descriptions of all the industrial and related architectural monuments supposed to be included in the Park.

On the base of cartographic, iconographic, written and other sources, the picture of development of the structure of the towns has been reconstructed (historical-documentary investigation).

The scheme of the regime zoning for the historical parts of the town has been designed (the scheme of protected zones are studied by town authorities.)

Ecological investigation of the condition of the planned museum-park zones' soils has been conducted and the measures for the rehabilitation have been proposed.

The structure of the museums has been designed.

Apart from the mentioned acts, renovation of some buildings, the architectural monuments of the 18th-19th centuries has been carried out in Nizhny Tagil.

During spring 2000, the system of contracts on designing complete architectural projects of industrial-landscape parks in all the towns and the restorations of several remarkable buildings has been concluded. New museums are actively established. Their names speak for themselves: the Museum of Metal in Verkhnya Salda, the Museum of Rare Metallurgical Technolo-

gies (also Museum of the Story of Technological Thought) in Nizhny Tagil. It might also be noted that the authorities in Nizhny Salda, who originally declined to participate in the project, today insist on accelerated investigation of the town's historical area to integrate into the common programme of the Park in time. Summer of 2000 promised to be a very interesting and intensive time.

*Sergei V Ustiantsev, Nizhny Tagil, Russia*

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## **Preservation of steel industrial heritage in Seixal, Portugal**

In 1961, Siderurgia Nacional began to function in Paio Pires, Seixal municipality, and was the first and the only Portuguese factory ever to produce steel. Conceived as a national project, it mobilized workers around the country, foreign experts and large investments. The progress and the productive growth of the '60's and 70's was followed by restructuration plans considering the world steel market crisis due to an excessive production. In 1994, Siderurgia Nacional was divided and privatised and as a result of that, three different enterprises were formed.

The patrimonial survey of one of those firms: the Siderurgia Nacional - Empresa de Serviços, S.A is being done since April 1999 by the Ecomuseu Municipal do Seixal (in collaboration with the company) on the ambit of a study and survey project of Seixal's industrial heritage. The investigation is being developed under two perspectives: on one side, the inventory and photographic record of the factory plants and the process of manufacture and, on the other side, the oral history of the working class memory.

An electric arc furnace is expected to begin functioning on 31st of March 2001 replacing the now existing blast furnace, which means the end of the integrated steel industry from Siderurgia Nacional - Empresa de Serviços, SA.

About the facilities to be shut down, there's the decision to preserve the Blast Furnace and the purpose to establish a museological unity integrated on a museological circuit extended through the municipality territory, where several Ecomuseu Municipal do Seixal's sites are included. The only Portuguese Blast Furnace, of great significance to the industry history, assumes an important place both in the national industrial patrimony and in the actual museological projects conceived to shut down facilities inserted in functioning industrial unities.

*Graça Felipe, Ecomuseu de Seixal, ecomuseu.qt.cms@mail.telepac.pt*

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## **Uckange steel works, Lorraine, France**

The approach to the preservation of part of the Uckange blast furnaces, in the Lorraine coal field in eastern France, along the Moselle, shows how contemporary schemes have not only to draw on a very diverse portfolio of funding sources, but to connect with a public much larger than that with even a passing interest in industrial heritage.

The consultants' project that examined the re-use of the old works - N°4 Blast Furnace, four Cowper stoves, blowing machines, gas and coke plant - specifically excluded a museum character, envisaging instead a multi-functional space with the steel works embedded in a cultural park. The proposal included a technical garden to explain a century of steel making, with dramatic lighting of the blast furnace, coal and gas plant; a network industrial museum with a historic documentation centre to interpret the adventure of Lorraine steel; an 'Observatorium' on social and economic restructuring in the third economic age; and a cultural offering in collaboration with local organisations, including spectaculars, a permanent atelier of Lorraine folk theatre, monumental art and photography, and an interior design/domestic science workshop.

The initial programme focused on maintaining the fabric of the blast furnace, connecting the site more effectively with the city, and opening it periodically for public events. Confidence in the possibilities of the project, and that maintenance of the blast furnace would not consume whatever public monies might be given, grew gradually, until support was secured from the Minister of Culture in Paris for its inclusion in the regional plan for 2000-2006.

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## **Blaenavon Industrial Landscape joins World Heritage List**

A new industrial site joined the World Heritage List at the end of 2000. At its annual meeting in November the World Heritage Committee inscribed 50 cultural heritage sites, of which one was recognised for its industrial heritage - Blaenavon Industrial Landscape in the United Kingdom. The outstanding universal significance of this area has been recognised for the role of South Wales in the development of the iron and coal industries in the eighteenth and nineteenth centuries, and the exceptional survival of an extensive landscape of mining, ironworking, transport, water supply and settlement.

There are now 690 World Heritage Sites, of which 26 are classified as industrial. However, several others have a quasi-industrial significance, including two further sites inscribed in 2000 representing neolithic flint mining in Belgium and nineteenth century coffee growing in Cuba.

Blaenavon lies 40 km north east of Cardiff, at the rim of the

South Wales coalfield. A continuous landscape of mountains and valleys extending 8 km by 6 km has been inscribed. With its evocative remains of primitive railways, waterways, mines, quarries, ironworks and workers' houses, this is one of the best places in the world to see the course and consequences of the Industrial Revolution. The site includes the preserved remains of Blaenavon Ironworks, the Big Pit Mining Museum, the historic town of Blaenavon, and the Brecknock and Abergavenny Canal, as well as many other individual monuments connected with the past exploitation of the landscape.

Industrial development on a large scale began in the area in 1788 when a group of entrepreneurs established Blaenavon Ironworks, which quickly became one of the largest iron smelting works in the world. From the beginning it had three large furnaces, blown by steam power, and was managed integrally with the mineral exploitation of an extensive landholding. The whole area owned or influenced directly by the iron company now forms the World Heritage Site.

Blaenavon Ironworks is in state care with Cadw: Welsh Historic Monuments, and includes substantial remains of five furnaces dating from 1788 to about 1870, cast houses and a foundry, calcining ovens, a water balance lift, and the original housing of the key workers. Nearby, Big Pit coal and iron ore mine has been preserved as a museum where visitors can tour underground workings. The routes of the primitive railways which served the works can be followed through a vast open landscape of coal mine sites, tips, limestone quarries, and surface workings for iron ore. Just across the mountain lies the Brecknock and Abergavenny Canal, which remains in use for leisure traffic and retains an important early iron transshipment warehouse among other features. The town at the centre of the World Heritage Site retains not only early nineteenth century houses, shops and pubs but a fine works school of 1816, a church built by the ironmasters in 1805 and a Victorian Workmen's Institute.

The successful Nomination Document and Management Plan were prepared by Cadw: Welsh Historic Monuments, Torfaen County Borough Council and the Royal Commission on Ancient and Historical Monuments in Wales. These organisations are continuing to work within a group of local authorities and other bodies committed to the conservation and regeneration of the Blaenavon area and its management as a World Heritage Site. The breadth of this partnership will help to ensure an holistic approach which will conserve the landscape and develop its heritage interest in the long term.

The importance of industrial heritage in representing major shifts and transformations in society is now agreed, and further industrial nominations are likely to be considered in future years. Blaenavon joins the Ironbridge Gorge as the only other industrial World Heritage Site in the United Kingdom, often regarded as the birthplace of the Industrial Revolution. However, three more industrial sites, all connected with the development of the textiles industries, have been nominated for consideration in 2001: New Lanark in Scotland,

the Derwent Valley in the English Midlands and Saltaire in Yorkshire.

*TICCIH Welsh correspondent*

#### Footnote

One of the best photographic records of the steel industry is Blast Furnaces, by Bernd and Hilla Becher. Published in 1990, it follows the Becher's familiar format of emotionless, black and white images of industrial buildings that they have applied to factories and water towers. The pictures have no historical or archaeological intention, but considerable documentary value. This has been enhanced by the compilation of detailed captions for the American site in the Becher's book by John Teichmoeller and Michael Rabbit, with the Railroad Industry Special Interest Group, that has been published on the RRISG web site: [trak.to/rrsig](http://trak.to/rrsig)

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Worldwide

### **GREAT BRITAIN**

An immense American 'walking dragline' is being conserved and interpreted by a society in Leeds, England. It was built in 1946 by Bucyrus Erie in South Milwaukee, and brought to Britain in 1954. It 'walked' on long box-like shoes, moved by rotating cams that propelled the machine at a speed of about 300m per hour. The scoop could remove up to 20m<sup>3</sup> of overburden to reveal the coal seam beneath. After working in various parts of the country, it ended up near Leeds, where it is being restored by the St Aidans Trust, with various grants, to form part of a natural park in a former opencast coal mine. The Trust think it may be the only preserved example in the world. The 'Friends of the Walking Dragline' can be located at [www.iarecordings.org/dragline](http://www.iarecordings.org/dragline)

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## **Events**

### **TICCIH Conferences**

Spain

TICCIH Intermediate conference on the Textile Industry

30, 31 March, 1 April, 2001, Terrassa, Barcelona

Hosted by the Museu de la Ciència i de la Tècnica de Catalunya, in association with the Norrköpings Stadsmuseum, Sweden, and the Manchester Museum of Science and Industry, England.

The first conference of the Textile Section of TICCIH will dis-

cuss proposals for identifying historic sites of international importance; the textile industry and industrial settlements; the transfer of technology; and the conservation of historic machinery. The meeting will also create an international committee and elect a Secretary, and establish the basis for its future work, research and study. The conference includes working sessions on these themes as well as visits to historic textile sites in Catalunya. Registration will be 60 Euros.

All the information necessary to register is on the TICCIH web page, including booking accommodation. Places are limited so people interested in attending should contact the address below.

Secretary Textile Section, Museu de la Tècnica i de la Ciència de Catalunya, Rambla d'Egara 270, 08221 Terrassa; TICCIH@correu.gencat.es

## Other events

### Sweden

Industrial heritage as a force in the democratic society

Four day conference in May, 2001, Bergslagen. Programme will be presented in October, 2000.

Coinciding with the Swedish presidency of the European Council of Ministers, a conference related to the key-words democracy-identity-force: How are industrial monuments used to create identity? Is the cultural heritage used for anti-democratic purposes? How do industrial monuments enrich society today and in the future? The meeting is focused on Degersfors, a town that has undergone great structural changes in recent years.

Organised by the Swedish National Heritage Board, the Delegation for Industrial Heritage and the Orebro County Administrative Board. Tel: (0)8 5191 8000 or (0)19 17 4050, [www.raa.se/industrial](http://www.raa.se/industrial)

### United States

Society for Industrial Archaeology (SIA), 30th annual conference

10-13 May, 2001, Washington DC

A joint 30th birthday celebration with the Historic American Engineering Record, which will have an exhibition at the National Buildings Museum. One theme will be the buildings of Montgomery C Meigs, including the Capitol, Pension Building and Washington Aqueduct. Visits inside the city as well as tours out to Frederick, Maryland and Harpers' Ferry and Martinsburg, West Virginia. Papers have been called for on the themes of industry in the Washington area, canal and railroad transportation, urban water supply, construction technology, printing and engraving, and the defence and aerospace industries.

The deadline for proposals was December 31, 2000.

Christopher Marston, HABS/HAER, (202) 343 1018, [christopher\\_marston@nps.gov](mailto:christopher_marston@nps.gov), or Dean Herrin (301) 624 2773, [dherin@fcc.cc.md.us](mailto:dherin@fcc.cc.md.us)

### United States

Joint conference of the Mining History Association and the TICCIH Non-Ferrous Mining Section

31 May – 6 June, 2001, Montana College of Technology, Butte, Montana

The first meeting of its kind will include two days of papers by the MHA followed by a tour of the Oak Mining District on the 3 June. The part of the conference organised by the Mining Section will probably include two further days of papers by TICCIH, and a final day of site visits on the 6 June.

Non-Ferrous Mining Section, Secretary Richard Williams, I H C, Poldark House

Poldark, Wendron, Cornwall TR13 0ER, Great Britain, tel: +44 1326 573173 fax: 1326 563166, [TICCIH@heritage-coinsultants.com](mailto:TICCIH@heritage-coinsultants.com)

### Great Britain

Second International Early Railways Conference

6-9 September, 2001, Museum of Science and Industry, Manchester.

The conference will include papers on many aspects of early railways (defined as being pre-mainline in concept but not necessarily in date) not only in Britain but in America and a number of European countries. Topics will include track, locomotives, technology transfer, operation and finances. The closing date for proposals for papers is the end of this year (please send with a synopsis to Dr Michael Lewis, 60 Hardwick Street, Hull HU5 3PJ, GB,

[michael@lew.karoo.co.uk](mailto:michael@lew.karoo.co.uk)

Scientific committee: Centre for Railway Studies, University of York, National Railway Museum, Newcomen Society, Beamish Open Air Museum, and the Locomotive Trust.

Full details will be available from the end of January from the Executive Secretary, Newcomen Society, Science Museum, Exhibition Road, London SW7 2DD.

### Chile

Third colloquium on the Preservation of Industrial Heritage, TICCIH-Chile

13-16 September, 2001, post conference tour 17-21 Septem-

ber, Santiago de Chile. Call for papers.

The themes chosen are: industrial archaeology - conceptual framework and new directions; inventories and listing; rescue, conservation and re-use - case studies; education; and tourism. Summaries of conference papers should be sent before 30 April, 2001. TICCIH-Chile, Tel/fax: (56-2) 3364 2113, conpalch@entelchile.net

## **France**

### Highlighting Industrial Heritage

17, 18 and 19 September, 2001, Saline Royale, France, plus two days of site visits in Franche-Compté and Swiss Jura.

See the article in Worldwide, or the web site [www.wanadoo.fr/saline-royale](http://www.wanadoo.fr/saline-royale)

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## **Russia**

TICCIH XII International Congress: 'Preservation of industrial heritage and rehabilitation of old industrial centres'

10-14 July, 2003 in Moscow, and 14-18 July post-congress tour to NizhnyTagil in the Urals

Papers are invited on the above theme. The official language will be English, but papers also in French and Russian; simultaneous translation of plenary sessions. Study visits in Moscow and cultural programme including the Kremlin, Bolshoi Theatre, and the Moscow river. Post-congress tour of mining and metallurgical sites in the Urals, including helicopter trip over the 1882 Ust-Borovsky salt works. Details will be sent out in December 2001. Eugene Logunov, Institute of Material Culture, PO Box 65, Ekaterinburg, B-109, Russia 620109, tel: +7 3432 297874 fax: +7 3432 297731 [logunov@online.russia.ru](mailto:logunov@online.russia.ru)