

# The MUNDLING STICK



the LION  
Salt Works  
TRUST

Newsletter of the Lion Salt Works Trust: **WINTER 2004**

**VOLUME 9 No.4**

## NWDA GRANT AWARD Supports Salt Works

The North West Development Agency is to support the completion of feasibility work at the Lion Salt Works. A grant of £174,250 will enable the Trust to commission Donald Insall to complete the architectural and engineering feasibility works to RIBA Stage D and produce a Cost Plan. The study will incorporate, and build on, work carried out during 2003 and enable full applications to be made to the Heritage Lottery Fund by the end of this year.

The NWDA project grant is to support 'architectural and structural engineering design for a working industrial museum and eco-centre.' 'Using all endeavours to achieve completion of the work by 1st August, 2004.'

Our core team draws on the skills of The Moreton Partnership, The Continuum Group, Bob Costello Associates, Davis, Langdon and Everest, The Centre for Alternative Technology and Cox and Speller.

The work programme for 2004 will bring to a successful conclusion the background design work laid down in our Action Plan published in 2001 and summarised in The Mundling Stick Vol.7.2. The Trust has raised £300,000 over the past year to fund these studies. Brief descriptions of the Marketing Study, Building Survey, Woodfuel Survey and Conservation Plan have been provided in earlier newsletters. The Trust is extremely grateful to DEFRA, English Heritage, Cheshire Rural Recovery and the Heritage Lottery Fund, Cheshire County Council, Vale Royal Borough Council and the volunteers of the Lion Salt Works Trust for their support and funding of these studies.



## SALT 2003 CONFERENCE SUMMARY

The conference held as part of SALT 2003 welcomed nine speakers from six countries. All had a common interest the preservation and interpretation of their own local salt heritage. All had stories that had relevance to the Lion Salt Works.

Mike Nevell, Chairman of the CBA Industrial Archaeology Forum provided the closing comments to the lectures. He highlighted the common links between our projects and the benefits and rewards that would be created by the collaboration and exchange of ideas. He underlined the fragility of the salt heritage around the world and the common threats that had been demonstrated by each case study. For such a common, everyday commodity, salt was rarely thought about by its daily users, and preservation problems which had to be addressed locally were in fact common to all sites. By creating a partnership each site would enhance and recognise the strengths and the stories each had to tell and be able to better inform the owners, the funding bodies and the public about the value and reasons for their protection and restoration.

The Lion Salt Works Trust and Vale Royal Borough Council were extremely proud that the speakers came to Northwich, to present their papers and to spend time at the Lion Salt Works. It indicated the international recognition that the Lion Salt Works is capable of bringing to Vale Royal.



Supported by the  
**Heritage Lottery Fund**

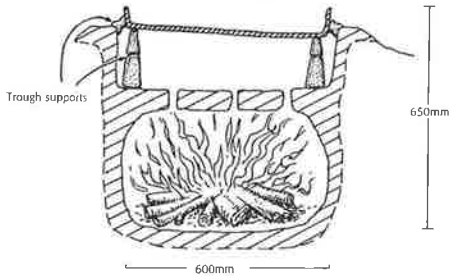
*mundling stick n.~tool used to pack salt crystals into the wooden tubs when making lump salt. This newsletter will likewise try to cram in all the latest information about the conservation and restoration of the Lion Salt Works.*

## CONFERENCE DETAILS

The conference was in four parts. Andrew Fielding set the scene for the study of salt in the UK and Tom Lane followed with a review of work on salt sites in Lincolnshire. The second session introduced projects based in Spain and Portugal, which are establishing wider partnerships and seeking both the restoration of historic sites and traditional production methods. The third session considered the surviving evidence in Germany for evaporation of brine in the Roman period and looked at two sites of open pan salt production, one in the USA, the other in France. Colorado and Salins-les-Bain are both very similar to the Lion Salt Works. The final two talks addressed the presentation of historic salt making and the reconstruction of salt making sites on the Pacific Coast of Oregon, USA and on the island of Laesoe, Denmark. The whole day was extremely varied, enlightening and hugely appreciated by the audience.

## LINCOLNSHIRE

### Tom Lane, Heritage Lincolnshire

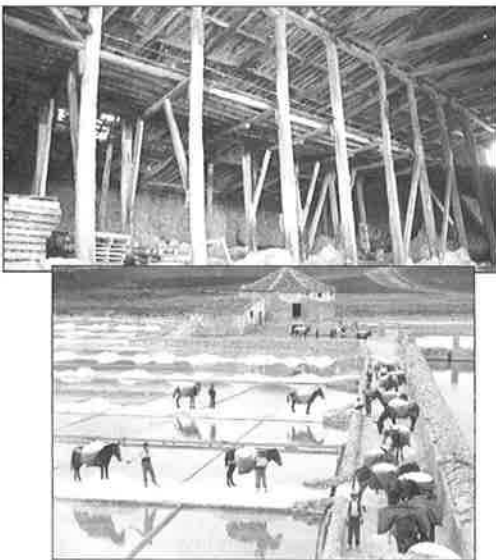


During a Fenland Survey carried out between 1981 and 1988, 353 sites with briquetage were discovered. As part of an English Heritage Fenland Management Project (1991-5), further sites were found. Three sites related to the processing and manufacturing of salt from tidal sources were excavated. Middeton was the first complete, open area excavation of a Roman saltern in the Fenland.

The study raised questions relating to the contemporary environment, analysis of briquetage and an understanding of trade and exchange mechanisms.

## SALINAS DE IMON, Spain and the ALAS PROJECT

### Katia Heuso, Friends of Inland Salinas



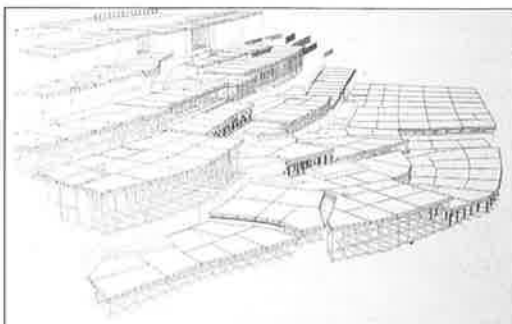
Inland salinas are similar to coastal salinas but their brine is derived from rock salt and not seawater. Just like coastal salinas there is increased competition from modern salt making processes and few people now want to carry out the manual work required to harvest the salt pans. Maintenance has been reduced on many sites and knowledge about how to operate the salinas is being lost.

The Friends of Inland Salinas are studying the sites to encourage their use as a catalyst for economic regeneration. The sites support a specialised flora and fauna, which add a unique bio-diversity to the brine bearing areas and have many landscape features and buildings which are attractive to tourists.

The project is looking at inland Spanish salinas in a way similar to the ALAS Project which linked the coastal, Portuguese site of Figueira da Foz with salinas in the Mediterranean. The ALAS project is looking to raise awareness of the remaining hand-harvesting salinas where traditional skills and culture can be retained alongside the specialist flora and fauna which has adapted itself to the unique saline conditions.

## SALINAS DE ANNANA, Spain

### Juan Ignacio Lasagabaster and Mikel Landa, Alva Regional Council



The brine springs in the Muera valley were first recorded in 822 and Alfonso VII established a royal monopoly on the salt in 1137. Free markets were created in 1814 but became uneconomic and the unique evaporation platforms and brine canals became abandoned. The Salt Valley was declared an Asset Categorised as a Monument by the Regional Council's Historical-Archaeological Heritage Service. In 1998/9 ownership problems were resolved and the Salinas de Annana Salt Valley Comprehensive Management Plan was developed. There are thousands of evaporation platforms supported on timber frameworks above brine cisterns and salt stores. The future of the Salt Valley depends on the skills of the restoration team and its focus for educational and leisure related activities. Specialist production of salt at the site and the promotion of the area for economic regeneration will provide underpin the restoration work.

## A GERMAN PERSPECTIVE

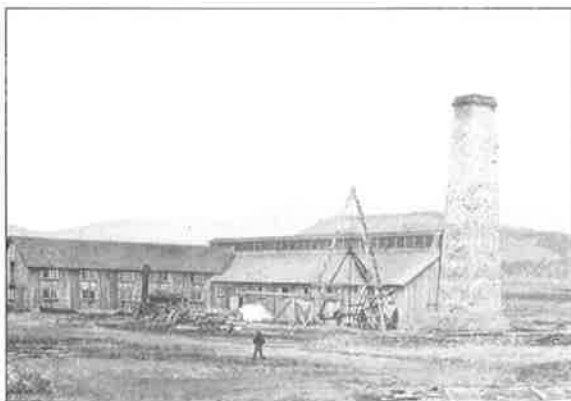
Susanne Jeulich



From the seventeenth century there are a multitude of sources and artefacts available to help us understand the salt making industry in Germany. Information exists about the working processes, organisation and techniques, which are similar in all medieval salt works. However, if we take a step back into the early medieval and Roman periods the evidence decreases. In Bad Nauheim, clay containers were used in well-organised sites with wooden brine storage tanks and stone surfaced settlement pavements. By comparison, in Cheshire there are over 23 lead salt pans from this period, in Europe only three, one from Luneburg, one from Soest and another from a non-salt area at Avenche, Switzerland. Maybe the Roman lead pans were all recycled and are lost to archaeology for ever!

## COLORADO SALT WORKS, South Park, USA

Jackie Powell and Gary Higgins  
Architectural Partnership



This site has been recognised as the last standing open pan salt works in the USA. The site is rapidly deteriorating as cattle on the ranch use the buildings for shelter. Their scratching has already led to the collapse of the chimney. The works drew brine from a spring where it was heated in round kettles and rectangular salt pans.

Established in 1862 by Charles L. Hall, the salt was used primarily for chloridisation of metals in the adjacent gold fields. The arrival of the railway in 1870 led to the short operation life of the site. The site is recorded in the local newspaper and photographs exist of attempts to sink a new brine shaft in 1868. The internal arrangement with kettles and pans is recorded, but still requires further archaeological investigation. Surviving iron kettles and pans are to be found in the surrounding landscape.

Current investigations have been funded through the Colorado Historical Society State Historical Fund.

## SALINS-LES-BAINS, France

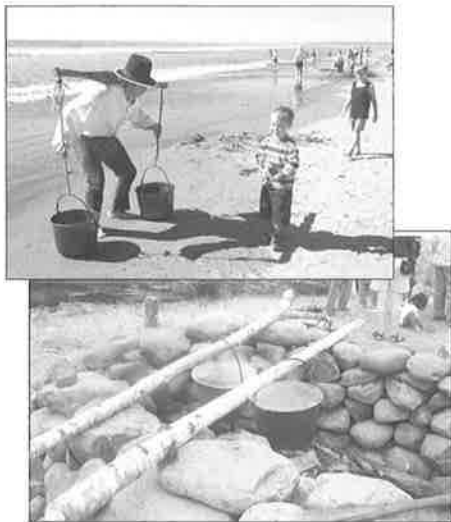
Ivan Grassias



The last open pan at Salins-les-Bains salt works belongs to a museums network : the Museums of Technology and Cultural Heritage of Franche-Comté, the Franche-Comté Region, is in the East of France, close to Switzerland. Settled since the Neolithic the salt works are first mentioned in the Acts of the Abbey of Flavigny, Burgundy in 792. The nineteenth century works operated until 1962 and was bought by the town in 1966. The site was listed an historic monument in 1971 and by 2003 was attracting 56,000 visitors per year. The salt pans were initially oval but became rectangular. Of the four pans left in 1962 only one now remains – the only open pan left in the whole of France. A restoration and conservation program, costing up to €240,000, is currently underway. It is supported by the French Ministry of Culture, the Franche-Comte region, the Jura Department, the town of Salins-les-Bains and the Heritage Foundation.

## LEWIS & CLARK, Oregon, USA

### John Luzader, Living Museums of the West



The Corps of Discovery, under the command of captains Lewis and Clark, found themselves wintering upon the coast of present day Oregon from December, 1805 to March, 1806. Along with maintaining the original intent of their expedition of exploration and observation, the Corps now found itself gathering its resources and preparing for the return journey to the United States. One of their primary concerns was the preservation of food for the passage, which would allow them to travel for longer periods without having to hunt on a daily basis.

In the summers of 2001, '02, '03 and February 2002 Fort Clatsop National Memorial, with the Seaside Museum and Historical Society, Oregon and the Living Museums of the West, presented a first person, historical interpretation near the original 1805 salt making site. The program allowed the public to rediscover a lost aspect of the Corps of Discovery. As to the salt, each day produced three to four pounds of white salt. This came from sixteen hours of daily labour and 180 gallons of salt water, which would have yielded about 3 1/2 bushels of salt in the same amount of time that the original salt works was in operation.

## LAESOE, Denmark

### Paul Christensen, Laesoe Salt Works



The Laesoe Salt Works is a reconstruction of excavated medieval salt houses found on saltings on the south side of the island. Salt has been made on the island of Laesoe from the early medieval period and continued until 1652 when production had to stop because of the lack of firewood. There may be up to 1,500 salt making huts on the island. The brine is formed by seawater being trapped in the quite thin layer of sand, which is lying on a solid layer of blue clay underground. A small museum for salt production was created in 1991 trying out the theories with practical experiments and to please visitors. The project is working very hard to retrieve and recreate the old handcraft of salt making, which is a most important part of the cultural history of the island. The brine is first heated up to 90 degrees Celsius, then reduced to 70-75 degrees in open pans as the big beautiful pyramidal crystals appear. Today, just as before, it is used at the table as finger salt.

All the participants will keep in touch over the coming years. Progress reports on the various projects and sites will be exchanged and we will continually update our experiences for the benefit of all.

#### PUBLICATION

Transcripts of the lectures are being prepared for publication. This will be Lion Salt Works Trust, Research Report No.2. Included will be a copy of our DVD of Roman salt making using lead salt pans, devised by the Trust and produced by Julian Baum and Claire Duval of Take 27. The report will retail at £9.50. A pre-publication price of £6.50 is offered for orders placed before 30th April, 2004.

The trust would like to thank: HLF; The Quality Hotel, Northwich; Northwich Memorial Hall; Vale Royal Borough Council; CBA Industrial Archaeology Panel; Annelise Fielding.

#### OPENING TIMES

The Lion Salt Works is open each afternoon 1.30pm to 4.30pm. May be closed Friday and Saturday. Donations welcomed : £1 per adult, 50p per child. Booked parties by arrangement. For further information call 01606-41823. Web site address - <http://lionsaltworkstrust.co.uk>

Help interpret your local heritage to others. The Trust still requires additional volunteers to assist with maintenance and to open the exhibition centre especially on Saturday afternoons.

#### THE MUNDLING STICK *by post*

If you would like to have a regular copy of The Mundling Stick sent to you by post please send your name and address to The Lion Salt Works Trust, Ollershaw Lane, Marston, Northwich CW9 6ES or telephone/fax 01606 -41823. Newsletters are currently sent free of charge.

Cheques for donations should be made out to THE LION SALT WORKS TRUST. If you would like to provide long term support for the Trust please ask for a Gift Aid form.

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