

The MUNDLING STICK



the LION
Salt Works
TRUST

Newsletter of the Lion Salt Works Trust

Agenda 21 Celebration Edition April 1999

AGENDA 21 AND THE LION SALT WORKS

Agenda 21 is about making a difference locally and affecting things nationally and globally. The Lion Salt Works is an active participant in these concepts.

The Project aims to restore the Lion Works as a working museum. It promotes local identity and distinctiveness, supports a range of initiatives which not only save the Trust money but also benefits the environment. It provides a focus for sponsors and volunteers who are helping to achieve the ultimate goal of preserving the only surviving Victorian open pan salt works in the country.

There has been a salt industry in Cheshire since pre-Roman times. It laid the foundation for the chemical industries in the area, affected the surrounding landscape and the built environment of Northwich.

The Lion Works aims to be more than a museum piece. By studying the past we learn about the process of change and prepare ourselves for the future. The Lion Works has adapted itself to 100 years of change. Preservation as a working museum is just another part of its continuous adaptation.

<u>LOCAL</u>	<u>REGIONAL</u>	<u>NATIONAL</u>	<u>INTERNATIONAL</u>
Vale Royal of England Tourist Association	NW Industrial Archaeology Forum	Association of Independent Museums	International Commission for Salt History
Cheshire Museum Forum	NW Tourist Board	Young Archaeology Club	European list of sites preserving traditional processes drawn up by the French Ministry of Culture.
Vale Royal Environment Network	NW Museum Service	English Heritage - Monument Protection Program	Links with overseas museums
Local volunteer support and encouragement of life long learning		Participation in Nationally sponsored events	www.lionsaltworkstrust.co.uk
Designated Conservation Area		Grade II Listed Buildings	

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

Day to Day Initiatives

Over a number of years the Trust has addresses the day to day running of the Red Lion Inn as a display centre and office. In making a few simple changes the regular revenue costs of the project have been reduced allowing more funds to be directed at the true restoration work.

Replacement of all standard lights with low energy alternatives

34 fittings previously using 3400watts of electricity reduced to 750watts
reduced energy costs

Trebled the amount of loft insulation to 12inches
reduced heating costs, reduced demand on heating system.

Proper use of thermostatic radiator valves
zoned heating for each room depending on use.
warmer office, cooler store rooms and displays. Reduced demand on boiler, even temperatures throughout the day.

Replacement of petrol lawnmower with battery powered mower
safer operating procedures, quieter operation, cheaper operating costs

Reuse envelopes for newsletter mailings
saving of 1,200 new envelopes each year.

General recycling
Use of fair-trade tea and coffee
Recycle all paper and glass jars

Learning from the Past The Lion Salt Works as a Technology Centre.

The Lion Works is able to demonstrate the changes in transport and production methods over time. The problems we face today were faced by our ancestors, particularly those related to change.

Changes in Transport : horse-river-canal-railway-road

Salt was originally transported by **pack horse**. This was expensive and slow so local salt was very important. Sea salt was predominant all around the coast even in Scotland. In the sixteenth century bulk transport by sea lead to cheaply produced solar evaporated salt from France and Spain usurping salt making centres in north Europe.

In Cheshire the better transport links via the **River Weaver** gave Winsford and Northwich advantages over Nantwich. Coal could be transported cheaply from the St Helens coal field. Overseas markets were developed via the expanding port at Liverpool and later Manchester.

In the eighteenth century the **Trent and Mersey Canal** drew coal from Stoke-on-Trent. After War One transport began to transfer from **canal to the railway**
After World War Two transport transfer from **railway to road**.

VOLUNTEERS

The Trust works with a number of volunteers. Some are weekly regulars, others help with specific projects.

All give freely of their time and expertise to help with specific tasks. Help can be wide ranging and varied. The most needed assistance comes in the form of acting as Site Steward or Guide. This function involves manning the site, guiding visitors and acting as shop assistant selling post cards and small souvenirs. Other jobs involve gardening, painting and simple site maintenance or designing and building display materials, exhibitions or occasional experimental archaeology projects.

As a rule their commitment is for 4 hours during an afternoon between 1.15pm and 4.45pm

There is still a need to recruit more volunteers so if you would like to help come along and talk to those who are helping at the moment or contact Andrew Fielding the Project Director and see how you can help.

Changes in Materials : Salt Pans

ceramic-lead-iron-monel metal

Early salt pans were made of **pottery** in the east and south of Britain.

Local salt pans were made of **lead** until the sixteenth century (probably because of the adjacent silver and lead mines in North Wales and Derbyshire).

Changes from lead to **iron pans** comes about at the time fuel changed from wood to coal.

Modern materials use **monel metal** developed for its low corrosive qualities when exposed to salt.

Changes in Materials : Salt moulds

ceramic-baskets-conical tubs-elm tubs-glass fibre

The archaeological use of a ceramics such as **briquetage** and VCP (Very Coarse Pottery) during Iron Age salt making is still not properly understood. **Wicker baskets** are depicted in Agricola's treatise in the sixteenth century and were the forerunner of the coopers' products such as the **peg top tub** used until the late nineteenth century. With developments in industrial saw mills boxes became cheaper to make than stave containers and elm tubs became the standard moulded shape. In the late twentieth century concerns over food hygiene and health and safety lead to the adoption of glass-fibre tubs at the Lion Works to prevent wood splinters becoming incorporated into the salt blocks.

Changes in Fuel : wood-coal-oil-steam-biomass

From pre-roman times until the sixteenth century **wood** was the predominant fuel. The maintenance of woodlands were important because without a constant source of local fuel technologies could not continue. From the sixteenth century **coal** became increasingly important and with developments in transport, bulky commodities could be carried to the industries causing local sourcing to become less important. Once wood was no longer needed to be used for fuel wood could be used for other products and whole scale felling, rather than coppicing, became widespread.

In the industrial era coal, pollution and labor cost lead industries to find alternatives to coal. The salt industry moved to combined heat and power systems incorporating **steam** and reduced atmospheric evaporation techniques. Even the Lion Works used cheap recycled **oil**.

For the restoration of the works in the twenty-first century the Lion Salt Works Trust is investigating **Biomass** energy which would return the heating process to a sustainable, non polluting product used from pre-roman times.

Pollution

The rise in coal as a fuel increased production and pollution - **smoke, sulphur dioxide, acid rain** as well as increased waste products - **clinker, pan scale, salt and lime waste** which were used to infill the associated **subsidence holes** caused by wild brine pumping and collapsing rock salt mines. The use of sodium chloride as a chemical feed stock led to the introduction of new chemical products and processes with their own transport, raw material and pollution problems. It is interesting to know that in the sixteenth century salt glazed potters were expelled from German towns because of the pollution they produced.

Advantages of Open Pan Salt Making

Though evaporating brine in an open pan is energy inefficient it produced a wide variety of salt crystals

boiling makes very fine salt suitable for the dairy industry

simmering makes common salt for ordinary uses

slow evaporation makes coarse common salt used for salting fish

Recycling in Open Pans

The furnaces were used as **incinerators** by local banks to dispose of confidential papers.

Dirty salt was sold for salt glazing sewer pipes and field drains, spread on fields for sugar beet and grazing land, to prevent stock piles of coal freezing up in winter and in one instance to clear snow from the terraces of Oldham football club !

All these changes including Food Hygiene and Health and Safety will be part of the story which the Lion Works has to tell.

1999 EVENTS

from 15th MAY

Museums Week

Museums Association and the
Department of Culture Media and Sport

MUSEUMSWEEK

15-23 MAY 1999

Cooking with Salt

Did you use Thompsons' Block Salt ?
If you have a specific recipe we would like to
hear from you. Help build up a cooking with
salt cookery book.

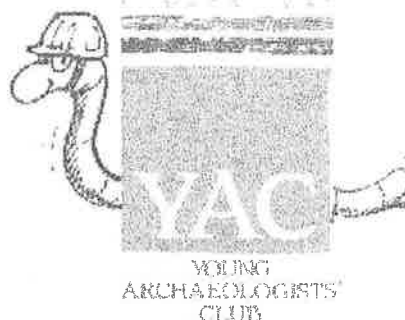
Sunday 23rd May

Salt boiling demonstrations together with
Morris dancing display by Fiddlers Fancy
which will feature The Marston Dance.

25th JULY

National Archaeology Day

Council for British Archaeology
Young Archaeology Club



More salt making together with information
for children about how to get involved in
studying the past.

11-12 SEPT

Heritage Open Day

Civic Trust
Department of Culture Media and Sport

Also part of the Northwich River Festival.
Salt making and a review of the Northwich
Virtual Reality Project being undertaken by
Lion Salt Works Trust, Mid-Cheshire
College and Virtual Presence.



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