



# Mill Memories

*The Newsletter of the Friends of the Mills Archive*

**Issue 17**

**Autumn 2015**

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CMCC-16174

*International issue Above - Norias of Hama (p.15)*

## Introduction to the International Issue

Phil Vaughan

This issue of *Mill Memories* focusing on our international holdings was inspired by volunteer and linguist Phil Vaughan, who has spent many hours working with the foreign language books in our library.



Among the folks on the Clapham omnibus, there may be a tiny few who have some vague idea about the scope and history of the Mills Archive. Those more in the know may think it's a repository for lots of stuff about the mills of England, and perhaps a little wider.

I'd like to give you the view of an insider (albeit only a volunteer part-timer), to redress that idea and unzip our hidden wealth of material from literally across the world.

When MAT arose back in 2002, it had four foundation collections - those of the SPAB Mills Section, Mildred Cookson, Alan Stoyel and the late Ken Major. Their material was indeed chiefly concerned with certain UK counties; however, when the archivists here at Watlington House began their mighty work of classifying and cataloguing, it was at once clear that these mill aficionados were very wide-ranging, often international, in their enthusiasms.

The Archive's subsequent acquisitions, by gift and by legacy, have often manifested the same feature: holiday postcards, family photos, historical notes, technical drawings have turned up from all parts of Europe and from every continent (except – so far – Antarctica). This multi-national flavour particularly applies to the Archive's reference library, reaching as it does across many cultures and languages. This is where you come for research into the seminal Latin texts from the past, via sugar-mills in the Caribbean, to 21st Century reviews of wind



*Horizontal windmill, Islam Qala, Herat, Afghanistan. Photo by John Day, 1973.*

JDAY-11538

## Introduction to the International Issue (continued)

turbine technology; and if your linguistic skills are up to it, you may browse in books and journals written in Spanish, Estonian, Welsh, Russian or a dozen other languages (plus English!). We are, of course, subscribers to numerous mill-related publications, ranging from such titles as TIMS (The International Molinological Society) to the journals of French and Dutch associations and the newsletters of the 'Friends of ... ' mill associations in local areas far and wide.

Enquiries – emails, letters, phone-calls – arrive from many quarters. Typical requests can be from someone who thinks his grandfather may have been the miller in some corner of the Kingdom, or who has bought a ruined water-mill in Portugal and wants to find out its history, or a student looking for guidance on the archaeology of Roman mill-sites.

It is challenging for our library staff, backed by volunteer helpers, to respond to all the seekers after knowledge, but they are skilled at searching among our two million plus records, both digitised and on our library shelves. And the staff commands several languages from Spanish, Catalan and Portuguese to German, French, Italian, Dutch, Polish, Ukrainian, Russian and Welsh.

So whether you are reading this in Arizona or Aberdeen, Canberra or Cambridge, please remember that the Mills Archive is here, now and international; we are molinologically at your service!

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*Below: Donkey turning rice in China. Postcard from the Mildred Cookson collection.*



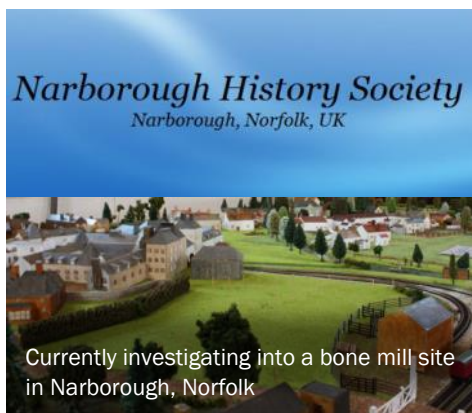
## New Heritage Partners/Corporate Friends

Liz Bartram

Support for the Archive remains strong and continues to grow, not just from generous individuals looking to support a good cause – for which we are most grateful – but also from other organisations.

We would like to welcome the following new Heritage Partners and Corporate Friends:

### Heritage Partners



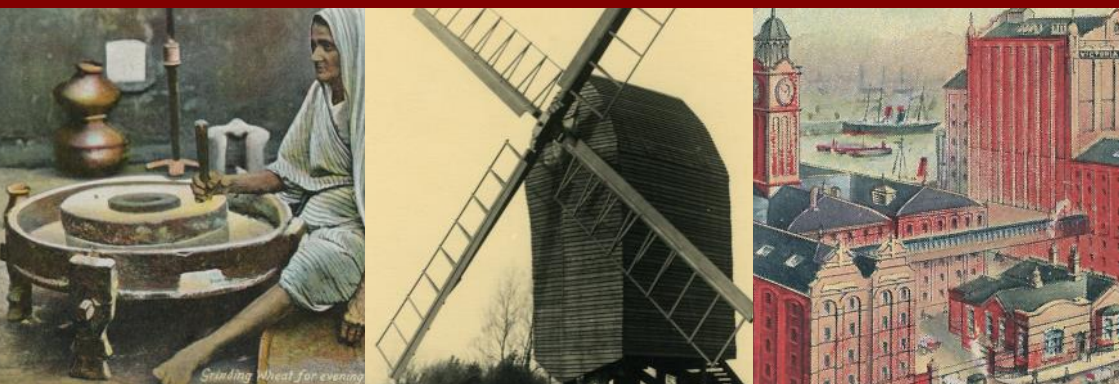
### Corporate Friends



**TIMS Educational Trust:** Thank you to the TIMS Educational Trust for becoming a Corporate Friend. The Educational Trust is a part of TIMS, which stands for The International Molinological Society. The TIMS Educational Trust raises funds to advance education in traditional mills and milling by means of financial support for publications, assistance with membership of TIMS, and conference attendance for those in straitened circumstances, especially in Eastern Europe, provision of tools for millwrights where such items cannot easily be afforded, and sponsorship of mill research.

**Addingford Engineering:** Thank you also to engineering company Addingford Engineering for joining the Mills Archive as a Corporate Friend.

# Quern to COMPUTER



## *The story of flour milling from 6000 BC to the present*

We are delighted to announce that the Heritage Lottery Fund has awarded us £68,200 for a project to tell the story of flour milling. This story is a fundamental part of human development and spans thousands of years, from its ancient origins in 6,000BC and up to present day, and encompasses quern stones, traditional windmills and watermills, the rise of roller flour mills and the computer-operated mills that we are dependent upon today.

There will be lots of opportunities for you to get involved, from suggesting events and pictures we should feature on an online timeline, to taking part in the National Flour Mill Survey and helping us to improve the records we have on the mills and mill sites throughout the UK.

Our team will also be expanding, with the addition of a Learning & Engagement Manager to deliver the project. Claire Wooldridge, our new LEM, will be putting the story together and will be announcing ways you can get involved in the very near future.

## Garden Party

Liz Bartram

On 13 June 2015 we held our annual summer garden party to thank our Friends for their support.

The day was well attended and the weather didn't disappoint us. We were joined once again by Brendan Barrow of eWaterpower, a Corporate Friend, with his model of a water turbine. Our guests also saw some attractive and intricate working models of steam engines that would have been used to power mills. These models were built, provided and demonstrated by Sean Holmwood, for which we are most grateful.

Thank you to all of our Friends for your support and to everyone who helped on the day. For those of you who came, we hope you enjoyed yourselves as much as we did.

**Next year's garden party will be on the 11 June 2016. Keep your eyes peeled for more information in the next issue of Mill Memories.**





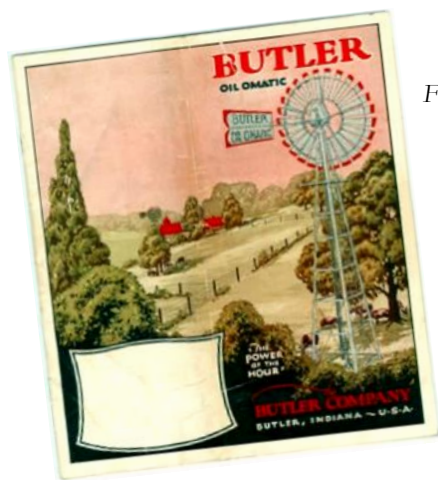
## Wind Engines from Around the World

Mildred Cookson

Wind engines or iron windmills, as the Americans term them, are usually thought of as machines for pumping water for cattle troughs on the plains of the USA. Pumping water for domestic homes was also fairly common for the wealthier families. These machines did, however, do many other useful jobs.

They come in many shapes and sizes and the Archive holds material of various sorts on the subject. We hold the complete run of the Windmiller's Gazette, a quarterly publication from the USA by Lindsay Baker, as well as all the books he has written. We also have a number of books by other authors on the subject. Some postcards are featured in the Archive catalogue, showing examples from the UK, France and many other countries around the world.

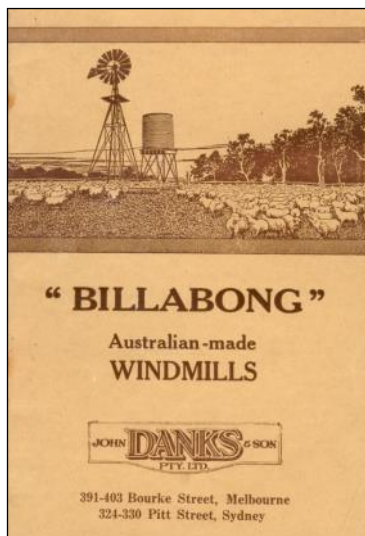
Old catalogues show them powering farm machinery, such as threshing machines, small grinding mills etc. These catalogues are sometimes beautifully illustrated with engravings and usually have a full colour cover as seen here. They demonstrate that wind engines were manufactured all round the world. The Billabong catalogue is an example from Australia.



*Above right:  
Postcard showing  
French Araou wind  
engine.*

*Left: Butler wind  
engine catalogue,  
USA.*

*Right: Billabong  
wind engine  
catalogue,  
Australia.*



## Wind Engines from Around the World (continued)

Some old catalogues show signs of much use and even the odd 'mouse chew' round the edges!

The windmiller or, as we would call him the millwright, was responsible for overhauling and mending the wind engines; sometimes he would have to travel many miles to the mills which were often sited on cattle feeding grounds miles from anywhere.

Ken Major's Foundation Collection contains many wind engine items including photographs, postcards, catalogues, and the book he wrote on the French Bollée wind engine. This was also translated into the French by Andre Gaucheron and is for sale in our Mills Archive Bookshop (*Les Eoliennes Bollée*). Ken also produced a recording sheet for keen windmill enthusiasts to fill in whenever they came across a wind engine; these, now in the Archive, were collected and filed to record how many still remain in the UK.

For the Archive garden party this year we had a display of wind engine material in the Founders' Room, which included a small scale model of an Aermotor wind engine (see p. 6).

From the Mildred Cookson Foundation Collection there are photographs of a visit by The International Molinological Society to Texas in 2000. A small group travelled many miles visiting factories still making the wind engines, as well as going on site with a windmiller overhauling an Aermotor engine. Visits were also made to various wind engine collections, situated in both in private homes and in wind farms. You need to have a large back garden to start a collection like this!



*Mr Dalley's  
private collection,  
Portalas N.  
Mexico. Photo by  
M Cookson.*

## Wind Engines from Around the World (continued)



*Above: Australian Fuller wind engine factory.*

*Right: Storm damaged J W Titt wind engine, UK.*

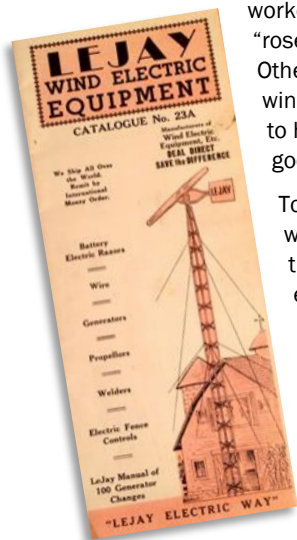


Some of the photographs in the Archive show the mills being erected, blown down by hurricanes and some that withstood the force of them. Sometimes the proud owners would climb up them to the top to be photographed. Catalogue illustrations show up to 20 or more factory workers standing on the wind “rose” to show its strength! Other images show crates of wind engines being loaded on to horse-driven carts or railway goods wagons.

Today we associate them with the modern wind turbine for generating electricity, but this is nothing new, as this catalogue of 1936 shows.

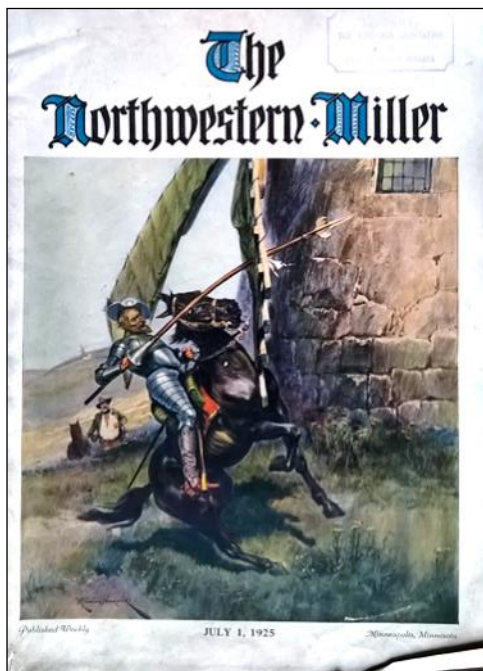
Perhaps as the modern wind turbine comes of age, we will be collecting images of these for the Archive and not leaving them until they are obsolete and disappearing from our landscape.

*Left: 1936 Lejay wind engine catalogue, USA. Mildred Cookson collection. Above: Workers at Monarch factory standing on wind rose.*



## Tilting at Windmills

Phil Vaughan



*Don Quixote was a favourite subject for front covers of mill journals, such as this issue of US journal The Northwestern Miller from 1925.*

The phrase is familiar to most of us. But what does it mean? and why?

*El ingenioso hidalgo Don Quijote de la Mancha* was written by Miguel de Cervantes (1547-1616) and published in 1605. The story tells of the adventures of Don Quixote, who believes he is knight-errant whose destiny is to fight injustice through chivalry. In one of the book's more fantastic episodes the hero engages in 'tilting' (or jousting with his lance) against a large group of windmills. The scene unrolls on a plain – not actually known to any of today's mill conservationists – where thirty or forty windmills are grouped.

As Don Quixote and his squire Sancho Panza ride into view, our hero declaims, "Fortune is guiding our affairs ... do you see yonder, Sancho, thirty or forty hulkling giants? I mean to do battle with them and slay them. This is a righteous cause; to remove such a foul brood from off the face of the earth is a service God will bless, and with their spoils we shall be rich."

The simple-minded Sancho Panza, baffled, responds "What giants?"

"Those over there," says Don Quixote, "with their great arms. Some of them have arms almost two leagues long." "Oh sir, take care," replies Sancho. "These are not giants but windmills. Those things that look like their arms are sails which are whirled around by the wind to turn the millstone".

If you now feel that this story is un-put-downable, you'll need to read on elsewhere; the book was translated into French, German, Italian, and English within 20 years of Cervantes' death (and sorry, we don't have a copy in the Mills Archive library). Oh, and what does the phrase mean? It simply applies to 'fighting a battle that can't be won – however doggedly you try'.



## Our New Online Shop

Please don't hesitate to contact me if you have any enquiries at  
[nataliya.vine@millsarchive.org](mailto:nataliya.vine@millsarchive.org)

Nataliya

### *Water Power and Watermills*

Books and guidebooks  
on all aspects of water  
power and watermills.



Watermill, Dedham



**High resolution digital images** from our catalogue are £10 each. Larger versions of the images on our catalogue are available here. Once purchased, these images may be downloaded to your computer.

Friends of the Archive can download free images using the catalogue.

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## *Wind Power and Windmills*

Books and guidebooks on all aspects of wind power and windmills

**Milling and Grain** is the successor to **Milling** (established in 1891). It is now the contemporary milling industry's most informative and dedicated information source, featuring each month reports on new technology, commodity updates, company profiles, products, people and much more.

Norfolk windmill at Acle £8.00



Chadouf, Egyptian Camel... £10.00



**Vintage windmill and watermill cards, modern cards and cards unique to the Mills Archive.** 9 cards or fewer in one order are post free in the UK.

NEW! Milling and Grain January



NEW! Milling and Grain February



NEW! Milling and Grain March



NEW! Milling and Grain April 2



## Mills in India

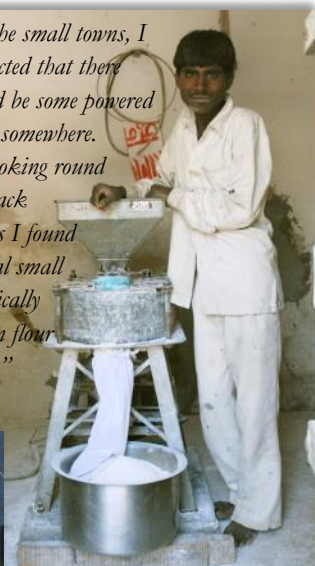
Nathanael Hodge

The collection of Geoff Holman has been featured in previous issues of Mill Memories, and consists mainly of material relating to the Holman millwrighting firm. Buried among them however are some images taken by Geoff on a trip to India together with his comments on 'looking for mills in India – when you're not really supposed to'.

*"When visiting a village I looked around some of the mud and wattle huts and found a hand quern with an attractive pattern carved on the runner stone."*



*"In the small towns, I suspected that there would be some powered mills somewhere. By looking round the back streets I found several small electrically driven flour mills."*



*"On visiting a large temple, I heard that they served up to 10,000 meals a day to pilgrims. Some exploration 'behind the scenes' revealed a large kitchen complete with a human chapatti production line. After further investigation I found the source of their flour supply, a room housing several mills of varying sizes."*



*"I also found mills similar to the flour mills, but used for grinding spices. Indeed one could recognise what the miller was grinding by his colour – the one producing turmeric was yellow!"*



## The Norias of Hama

Nathanael Hodge



CMCC-16164

**The city of Hama in Syria is famous for its norias - enormous wooden waterwheels used for irrigation. Like other historic sites in the country, their future is uncertain.**

A noria is an ingenious method of water raising. Literally 'wheel of pots' in Arabic, it is both an undershot waterwheel, set in motion by the flow of the river, and at the same time a scoop wheel, with containers around its rim filling with river water as it rotates and emptying at the top of the wheel into an aqueduct. There have been norias in Hama since the Byzantine era (pre 7<sup>th</sup> century) - the steep banks of the Orontes river made this the most practical way to get water to the surrounding fields. The seventeen wheels which still exist date back as far as the Ayyubid period (1171-1260) and vary from 10 to 22 metres in diameter. The largest, *Al-Mohammediyah* supplied water to the Great Mosque and could raise nearly 100 litres per minute.

Recent years have seen many parts of Syria's heritage damaged or destroyed. Hama has been the site of clashes between pro-democracy protestors and the security forces. In August 2014 this photo was posted on twitter, purporting to show one of the norias in flames. Its authenticity has since been questioned, but whilst the situation in Syria remains as complex and dangerous as it is today, the long term preservation of sites like these remains at risk.



## Finnish Mills

Kate Doughty



Throughout the summer my main internship project has been to catalogue and write about the 'Mills of Finland', taken from Rex Wailes' collection here at the Mills Archive.

The extent of the collection, I soon found, was huge, at well over 1,000 photographs alone. As the Archive develops and expands, it seems increasingly important to acknowledge and document in more detail the international collections as well as the UK ones. Rex's collection is extremely comprehensive, and is accompanied by four detailed articles in the *Transactions of the Newcomen Society*, volumes XLI, XLIII, XLIV and XLV, also held at Watlington House.

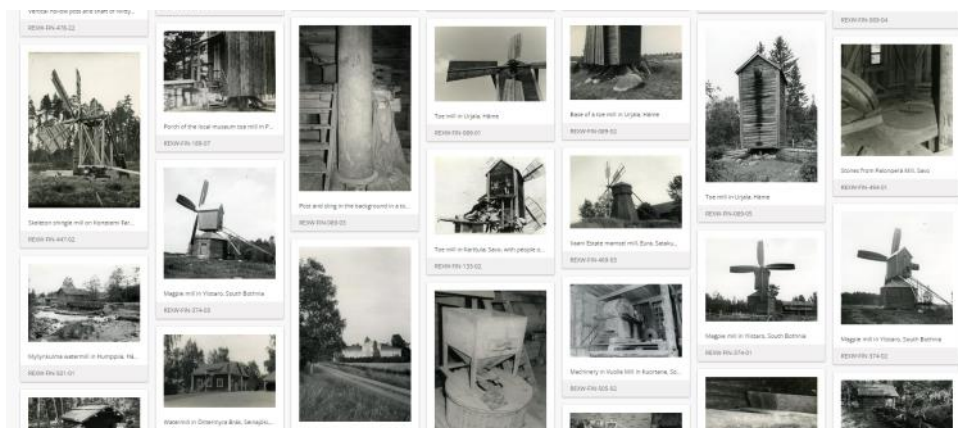
In Finland, the types of mill you are most likely familiar with are given different names; the post mill is most abundant and known as a 'toe mill'. Likewise with smock mills, which are known as 'mamsel mills'; 'mademoiselle' in Finnish. There are also some interesting names for hollow post mills – with special reference to the unusual tailpoles and collars – 'magpie' and 'chicken-hawk' mills are common.

It is possible to perform many 'key word' searches through the AtoM catalogue –



*Above: The collection and journals containing Rex's papers.*

*Below: Part of the collection online.*



## Finnish Mills (continued)

found through the 'Explore', 'Images & Documents' progression from the website homepage. However, if you are unsure as to *exactly* what you're looking for and would rather a general browse, you could look through the 'Features & Articles' option on the website. Here you'll find a multitude of information about the project and collection, as well as many hyperlinks to individual mills and lots of additional information about them.



REXW-FIN-133-02

Perhaps one of my favourite photos of the collection is of this group of people climbing and leaning on the toe mill in Karttula, Savo. There are no records to indicate who these people are; however from the photograph we can easily see that they are very comfortable with each other and the mill. It clearly serves as both a literal and figurative centre-point for this community, and is evidently very important to them. The image, taken in 1902 by an unknown photographer, is one of the earlier ones in the collection – it is also one of the few with people.

Many of the mills in the collection are situated at various museums around Finland. They are usually dismantled on their original site, brought to the museum, and then re-erected in their new positions. Often in this process the mills are stripped of all their parts;

## Finnish Mills (continued)

however a lucky few remain fully intact and are truly preserved; some mills even work again on their new site. One particular mill where this is the case is Niittymäki Farm magpie mill, which now resides at Metsämaa Parish Museum in Häme. On 18<sup>th</sup> November 1963 it was disassembled, in preparation for the move, and you can see the top part of the mill structure covered with snow, in a photo taken by Aulis Juvonen (right).

These are just two of the hundreds of fascinating mills and stories in the collection. Many accounts also have measurements and other technical details; some photos are the inner machinery while others focus on the aesthetics and landscape surrounding the mill. There's something there no matter where your interests lie, and I hope that you find something to catch your attention – I don't think it will be too difficult!



REXW-FIN-478-24



*Left:  
Kytsoja  
watermill in  
Heavenesi,  
Savo.*

## Bookshelf

### The Mills Archive Research Competition

The Mills Archive Trust is running its successful Research Competition for the third time. Proposed titles are required by 1 December 2015 and completed entries must be submitted by 31 May 2016. The winning submissions will be announced by 31 July 2016.



#### Flour milling emphasis

The judges are particularly interested in publishing research related to any aspect of flour milling, ancient, traditional or modern, foreign or domestic. Research on flour mills from the use of querns to modern industrial processing would complement our Internet-based timeline being funded by the Heritage Lottery fund (see page 5).

#### Two prizes are offered

- The **Research Prize of £500** is for a major piece of previously unpublished research (25,000 words) which will be printed as an A4-size standalone publication.
- The **Research Award of £50** is for shorter original research communications of about 5,000 words; the winning entry will be published as a special edition of Mill Memories.

For the full rules of the competition, please go to [millsarchive.org](http://millsarchive.org) and follow the link on the home page. Good luck to all entrants!

### Traditional Milling Technology in the English Cement Industry, 1796-1899



The winner of the second biennial Mills Archive Research Competition was Edwin Trout, whose study on Traditional Milling Technology is now available, free on request to Friends of the Mills Archive.

The paper (cover price £10) explores the early technology of cement milling, a neglected aspect of the history of the cement industry. Historical accounts usually focus on the development of the kiln as the

## Bookshelf (continued)

heart of this industrial process and this application of milling technology has been rather overlooked by the traditional mills community, whose attention is directed more towards corn milling for flour production and related processes.

The research highlights an unexpected and even picturesque – if only occasional – use of the traditional wind- and water-mill in a production process usually characterised as heavy, fuel-intensive industry. It establishes close parallels with flour milling, both in purpose and in process. It reflects an underlying trend from traditional to roller milling and the adoption of steam power, tracing the industry's mechanisation and electrification. It concludes with the replacement of traditional millstones by modern ball mills and tube mills in the 1890s.

This is the third Mills Archive Research Publication. Previous issues are *The Millers of Holgate* (author A J Cook) and *Mill Drawings* by Stephen Buckland (editor M Harverson). Copies of all three are available at <http://tinyurl.com/prqccz9>.

## Hampshire Windmills

Ken Kirsopp was one of the first volunteers at the Mills Archive and instrumental in establishing the Peter Dolman collection as the leading feature of our early website. A long-time member of the Hampshire Mills Group and the Mills Research Group, his main interest was in the windmills of Hampshire. Before he retired he donated his research notes in several bound volumes to the Mills Archive. Details of Ken's collection may be found here: <http://catalogue.millsarchive.org/ken-kirsopp-collection>.

Guy Blythman is well known as the author of books on the mills of several counties and was previously secretary of the Mills Research Group. He has also researched Hampshire Windmills and, with Ken's agreement, has submitted their work for publication in the Mills Archive Research Publication series. Our Research Management Board concluded that the work is an impressive body of research, well put together and may well be the definitive book on the topic.

We have therefore scheduled the book for publication as the fourth Mills Archive Research Publication and intend to publish it in April 2016.



*Bursledon Tower Mill, drawn by Karl Wood, 1945.*

## Visiting the Mills Archive

Friends and members of the general public are welcome to visit us in Reading. The address is on the back page and our website includes an interactive map.

Our **Library and Research Centre** are on the ground floor of Watlington House, and we are convenient for the town centre with free car parking.

We welcome visitors but please make an appointment first. We are open from 10am until 3pm on Mondays to Fridays apart from Wednesdays. Other days may be possible by prior arrangement.

We strongly encourage you to let us know beforehand of any specific research you are undertaking, so that we can retrieve the files from our store **before you arrive**.

Email [enquiries@millsarchive.org](mailto:enquiries@millsarchive.org) 1–2 weeks before your planned trip and offer us alternative dates if possible. We will do our best to be there when you need us.



*The Mills Archive Library  
and Research Centre  
Ground floor access  
Free car park  
Appointment necessary*

## Please join the Friends of the Mills Archive

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*“Our Friends  
are our future!”*



Our Friends are the lifeblood of the Archive. Their support helps to preserve vulnerable collections that would otherwise be at risk of being lost forever. We safeguard the memories for generations to come and provide all these services free to the general public. Without regular public support, we could not do this. Such support is a major influence on grant-giving bodies such as The Heritage Lottery Fund which likes its grants to echo public interest. Regular donations by many people are the best way of signalling that interest and guaranteeing the long-term success of the Mills Archive.

As an individual, the best way to support us as a Friend is to set up a standing order for £5 per month or more, and we would ask you to complete and return the standing order form opposite. You may donate annually if you prefer, and single donations are always very welcome. You can also donate by cheque or join online at [www.millsarchive.org/friend/register](http://www.millsarchive.org/friend/register)

### Key Benefits for Individual Friends

*Mill Memories* every six months

Invitations to exclusive Friends' events.

Discounts on purchases from our online bookshop

Free high-resolution images

Waiving of copyright fees

Much-reduced research fees

*Read more on these benefits in the “Friends’ Services” section of our website. New and additional benefits will be announced in Mill Memories, so watch this space!*

### Visit our Website

[www.millsarchive.org](http://www.millsarchive.org)

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I wish to join the Friends of The Mills Archive and I have completed the standing order form for at least £5 per month

**Or** I wish to be put on the *Mill Memories* mailing list (small donation appreciated)

**And** I am a UK taxpayer so you may reclaim Gift Aid on my contribution (*please delete if not appropriate*)

Name \_\_\_\_\_

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*Note we will not divulge your information to any other organisation or individual.*

Standing Order Form	To	Bank	Branch
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Credit THE MILLS ARCHIVE TRUST			
The Sum of £_____ (amount in words: _____)			
Commencing _____ and then every _____ (due date & frequency)			
Until further notice or until _____ and debit my/our account accordingly			
Name of account _____		Account No _____	
This replaces my/our previous standing order for the transfer of £_____ to the same account			
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## The Friends of the Mills Archive

Part of the Mills Archive Trust

Registered Charity no 1155828

Watlington House  
44 Watlington Street  
Reading, RG1 4RJ  
United Kingdom

The Friends of the Mills Archive are dedicated to aiding the work of the Mills Archive Trust and we value new members. We extend a warm welcome to family, local and national historians as well as to those who simply want to find out more about our milling heritage.

As a Friend you are supporting the care and public access to one of the world's great mill collections. It is an Aladdin's cave filled with memories, free to users and run by volunteers. The collections show the rich and diverse crafts, people, buildings, machinery and equipment involved with mills in the UK and around the world.

Friends enjoy a number of benefits (see page 22) as well as knowing they are helping to protect an unrivalled world-class resource.



**Please help us to save the memories!**

*For more information write to the address above or email us*

[friends@millsarchive.org](mailto:friends@millsarchive.org)

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## Next Time: Waterwheels



Waterwheels came in all sizes, from the small farm wheel to the large wheels that powered industrial machinery. The next Mill Memories will feature images of waterwheels in the various collections we hold, taken from the original drawings, photographs and postcards. These will include images from the Whitmore and Binyon, Joseph Armfield and Bodley collections.