# HTIDE MILL LIVING MUSEUM

Patrons of the Tide Mill: Lord & Lady Framlingham



#### **EDITORIAL**

This month it was decided that we would try to take the long view of Woodbridge Tide Mill.

After all, it has been here for a long time, the first record of it having been here is dated 1170 - a long time by any human standards. But, unfortunately, there are no images of Woodbridge Tide Mill from those early days, because Niépce (1765–1833) did not take the first photograph until about 1827 (However, his process needed eight hours of exposure to light, and the picture was fuzzy. In 1837 Louis Daguerre (1787–1851) created a sharp but oneuse image in a few minutes, so it's him we remember.). Consequently it was further decided that the long view we take of Woodbridge Tide Mill this month shall be more of a distant view. Hence the cover photograph, in which you may just be able to distinguish Woodbridge and it's Tide
Mill in roughly the centre of
the image, depending how
good the definition is on
your screen and how good your eyesight is - oh, and how good your imagination is, ťoo. Good luck with that!

So, taking the long view, Woodbridge Tide Mill may seem small to some, when viewed in the context of Life, the Universe and Everything (See Hitchhiker's Guide To The Galaxy by Douglas Adams), but it is anything but small in the establishment of our heritage and our town's history! And probably in the lives of all you active helpers and supporters, wherever you are and whatever you do. Thanks.

WTMeditor@gmx.com

# VIEW FROM THE BRIDGE

by John Carrington

We have had a very successful season and as it draws to a close I have a date for your diary.

We will hold the Trust's AGM <u>at 7pm</u> on Friday 29 November at Woodbridge Shire Hall.

This occasion will allow us report on the Trust's activities, share our plans and thank all those with out whose help the Mill would not function. Do come along, there is no charge and refreshments will be provided.

The meeting will also mark the end of an era. It will be the last public meeting for the old Trust. A new trust will take over on 1 October. The new Trust will allow us to do things we could not do before, especially in developing the Mill as an exciting place to come face to face with it's long history.

I hope to see you on 29 November. If you plan to come please drop me a mail at <a href="mailto:jcc@carringtoncom.com">jcc@carringtoncom.com</a> so that we can get the catering right.



# **CONTACT US**

Here are live links to send

emails to the contacts needed for those readers who want to contribute to the life of Woodbridge Tide Mill by volunteering for one or more of the various interesting, and fun, jobs that need doing...

If you want to put something

If you want to put something in the newsletter (or comment on it):

Ed.

If you want to be a Guide: Wendy

If you want to be a Miller: Dan

If you want to be a Flour Bagger:

If you want to be a Warden: <u>Dan</u>

If you want to be an Engineer: John W

If you want to be an Leafleteer:

Bob or John W
If you want to help with
Marketing:

Simon
If you want to help with something we have not thought of:

If you would like to contribute to our Collection or Archive:

If you want to contact our Chair of Trustees: John C

If you want to be a Friend of Woodbridge Tide Mill:
Be A Friend

# POSITIVE MILLING



THE DIFFERENCE BETWEEN BEING A TIDE MILLER AND A BATTERY, IS THAT A BATTERY HAS A REGATIVE SIDE.







# KEEPING FLOUR ALIVE AT HEATHERSLAW CORN MILL, NORTHUMBERLAND



We are on our travels again this month and only just staying in England, Heatherslaw Corn Mill being situated just a couple of hours gentle walk from Scotland (5½ miles for the pedants).

Heatherslaw Corn Mill is part of the Ford & Etal Estate and, as they say on their website: "Whether exploring the corn mill, walking the Flodden battlefield, viewing the stunning pre-Raphaelite paintings in Ford, riding on the steam railway, enjoying home baking in one of the tearooms, or exploring the more hidden corners of this estate we offer you a warm Northumbrian welcome and a great day out!"

Sitting on the banks of the River Till, Heatherslaw Mill is the most northerly working mill in England and is only place in Northumberland where you can experience the sight, sound and smell of a traditional mill.

There has been a working watermill on this site since before 1300, although the current mill is mostly Victorian. The earliest records are of Nicholas Graham's widow holding a watermill here in 1307 worth £4 a year. From 1376 the Mill was owned by the Ford estate, but no mention is then made of it until the mid 18th century. These years were difficult ones for the Border country, with





frequent skirmishes between Scottish and English Reivers, but the mill seems to have survived intact.

In 1768, the Mill was rebuilt as a 'double mill' with two mills under one roof. This time was a great period of prosperity for North Northumberland, with new strains of wheat and oats producing an enormous increase in yields. A new Forge Mill was also built on the other side of the Till to make spades and farming tools. By the early 1800s, seven water wheels were in action, with thirty houses along the river banks.

In around 1830 the Mill was enlarged to its present form, with three storeys and two mills placed side by side, each with its own water wheel and mill race. The mills served a large area, including local farm labourers who received all or part of their wages in the form of corn.

After the 1880s the business steadily dwindled as rural areas became depopulated. By 1909 the Forge Mill was unused, and in 1949 the mills at Heatherslaw had stopped grinding pearl barley. Soon the mill closed completely. The Mill rapidly became derelict with flood water washing in silt that choked the mill races and the interior. It seemed destined for demolition.

During the 1960s there was a growing interest in preserving the country's industrial heritage and in 1972 Mr Eric Griffiths formed the Heatherslaw Mill Charitable Trust to restore the mill and create a working museum. The silt and debris were dug out by hand, the millstones and water wheel renovated and the gearwheels and shafts repaired. It opened to the public in May 1975.

Heatherslaw Corn Mill is actually two water mills under one roof, each with its separate water wheel and mill race. Each mill has three pairs of horizontal grinding stones and a



vertical stone for pearl barley polishing.

The power comes in from the undershot water wheel at the bottom of the building.

The grain arrives in sacks at ground level and is then moved by hoist to the top floor, where the Miller stands, with the controls of the sluice gate (to vary the amount of water pushing the wheel around), the gap between the millstones and the flow of grain all within easy reach. The Miller also has to set the Timing Clock to judge how long to polish the barley, which depends on quality, moisture content and the condition of the millstones.

The grain is then tipped into hoppers that bring it down to the millstones. Two of the pairs of millstones you can see are made of French Burr, used to mill wheat. The others are made of Derbyshire Peak gritstone, for shelling oats. Pearl barley is tipped into a separate hopper that takes it into a vertical millstone arrangement with a vertical stone and outer casing rotating at different speeds to husk and polish it. It then goes through a dresser, is milled and dressed again and then bagged. The Upper Mill has been fully

The Upper Mill has been fully restored to working order and produces about ten tons of wheat, spelt and rye flour a year, and even a little bit of Bere flour. The Lower Mill remains much as it was before the restoration and is used to demonstrate parts of the milling process that usually take place out of sight, and they also uniquely have a water driven pearl barley mill which although not usually run for the public is really intersetung piece of milling machinery,











SPECIAL OFFER

ANY WOODBRIDGE TIDE MILL VOLUNTEERS WHO PRESENT THEMSELVES AT HEATHERSLAW CORN MILL, AND ANNOUNCE THEMSELVES AS **SUCH, WILL BE OFFERED A 25%** DISCOUNT ON THEIR ADMISSION FEE.

#### **Heatherslaw Flapjacks**

Healthy oat flakes can be used to make deliciously indulgent treats. Try this simple flapjack récipe to start with - also an easy recipe for children to follow.

Ingredients 200g (7oz) Heatherslaw Scottish Rolled Oatflakes

150g (5 oz) butter 100g (3 ½ oz) demerara sugar 2 tablèspoons golden syrup Preheat the oven to 190°C

Method

1. Melt the butter in a small saucepan

2. Put the oats, sugar and syrup into a bowl3. Add the melted butter and mix well

4. Tip into a greased baking tray and press

down flat Bake for 15-25 minutes until golden brown

6. Cut into squares before the mixture cools down- makes approx 20

#### WARDENS' DIGEST by Steve Molyneux

I'm so glad to now be contributing to the Warden's digest as being a warden means that I am privy to a wealth of stories that are recounted by visitors to the mill.

These aural anecdotes are all part of the mill's rich history and are at risk of becoming lost whispers on the winds of time so I will now endeavour to relay the few that have stuck fast in my memory.

Given the strong connection between Suffolk and Australia, we have no shortage of antipodean visitors. One chap visited with his daughter, armed with a large book documenting the life of his great grandfather who was a miller here in the 1800's. I remember a grand photographic portrait of a bearded gentleman in black and white and an entire hardback recounting his life giving some detail of his time as a miller. It was noted that he had lost the top of his little finger whilst milling so we assured his descendant that he was more than welcome to have a look around for

Another descendant of a mill worker, hailing from America, told tales of how his relative had fished in the mill pond with hand grenades and we pondered (no pun intended) on whether that could have been how the World War II ammunition and a human skeleton were found in the pond while it was becoming

the marina. I've also heard that in the 60's the pond was used by keen kayakers who would use dips in the walls as makeshift white water flumes and contribute to the pond's dereliction.

Another tale was that of the last commercial owners of the mill and the fateful day tidal milling in the UK came to an end. Apparently the owner came in and was already in a terrible mood, arguing with his brother and I imagine, most likely hung over. Instead of easing the sluice gate open slowly and reintroducing the wheel to turning reintroducing the wheel to turning gently after some time of standing

forcing the out of balance wheel to thrash around. As we know this led to the the main shaft braking after 107 years of service and this sounded the death null of tidal milling in the UK. I find it fascinating that this poignant historic event unfolded in our mill, all to the sound of the diesel powered hammer mill chugging away in the background. This is an age defining moment. An axis around which today's most urgent and pressing issue of climate change revolves.

sedentary, he opened the gates fully

In a more colloquial sense, just this morning, a gentleman came in with a hardbacked book of inked black

and white photos of landmarks around the UK. The photos were printed alongside descriptions of the sites and above the descriptions, a convenient photo sized space. The gentleman had been travelling the country and taking photos that diligently recreated the photos in the book and then sticking them in this convenient space. Of course, the book was open at a wonderful portrait of the mill from the 50's still clad in the corrugated iron shooting contracts. the corrugated iron sheeting so I directed him to the marina and pointed out which wall he'd have to go to to get in the right position to recreate the photo. (Photo attached).

Indeed, the mill has no shortage of stories and really acts as an anchor for the rich tapestry of lives that have passed through Woodbridge.









# **CURATOR'S** CORUSCATIONS **By Fraser Hale**

# All Dressed Up and... Oh, wait.

To help our younger visitors to get into the historic groove of the Tide opportunity to dress up in the style We will have a few "mini-smocks" Mill we will soon be introducing an of an eighteenth century miller.

The standard garb of rural craftsmen and labourers in 1793 was a loose-fitting smock

over britches and stockings. A heavier outer jacket or coverall and a soft wide-brimmed hat would keep the elements at bay.

Millers seem, not surprisingly, to have favoured a longer smock of natural undyed linen. It is interesting that so many images of the rural workforce of the time include the taking of drink. Clearly sporting a smock was thirsty work.

and felt hats in the Mill



for 5–7 year olds to wear while they explore the Mill.

To hopefully inspire our visitors we'll also have a new resident in the Mill.

He doesn't say much - bit of a clothes horse really - but he'll be dressed to mill

I'm aiming to have all these things in place in time for the October halfterm, to coincide with Heather's next

Crafty Morning



Don't forget that the best way to ensure that you continue to receive this newsletter (regardless of all the other benefits) is to keep up your membership of The Friends of Woodbridge Tide Mill. If you are not already a member, but would like to be one, use this link: Be A Friend

#### **BUSKER'S CORNER**

'To a halt' is not what a mill's meant to grind, But, at 200+ it's so sometimes inclined, And a puzzle is set for the Engineers' minds. An easy solution, they hope they will find, But, more usually need a more technical kind, And when all is fixed up and the gears start to wind, The team can then smile and be well wined and dined.





#### **Did You Have A Good Visit?**

If you enjoyed your visit to Woodbridge Tide Mill recently, or in the past, please let everyone know so that they can share experience your enjoyment by posting a message on tripadvisor

> WHAT IS THIS, AND **WHAT DOES IT DO?** Answer on last page











# SCHOOL REPORT by Heather Sheehan

What a busy summer it's been here at the Mill. It was wonderful to welcome so many new faces as a range of parents and children joined us for Lammas day and Crafty mornings at the Mill'. The Lammas day celebration kicked off the holidays and saw lots of families making corn dollies and eating delicious blueberry muffins as made for us (using our flour of course!) by the fab team at 'The Cake Shop'. Lammas day, meaning 'Loaf-mass', is celebrated on August 1st and was traditionally the day on which loaves of bread were baked from the first grain harvest and laid on the church altars as offerings. The idea of making corn dollies is a pagan custom and one that goes back thousands of years. People would make the dollies to hang and thus the corn spirit would spend the winter in people's homes, until the corn dolly was ploughed into the ground the following season. The dollies were rather tricky to make but our families gave it a good go and enjoyed learning about this ancient tradition.

We followed this, later on in the holiday with two craft mornings. At these events children made their own mini water wheels, coloured in Tide Mill pictures and searched the Mill for mice (not real ones of course!).

All the events were a huge success, drawing in lots of families who had never visited the mill before and plans are already afoot for October half-term when we'll be holding another Halloween themed craft morning on Monday 21st.







(This apparently useless gap is to prevent my iPad from insisting on a ninth page. Ed.)







#### **ENGINEERING GAZETTE**

#### By Richard Bull

Around the Mill there are a number of belts driving ancillary equipment. These include the automatic tendering device between the pit and water wheels, popularly known as the "governor", distinctive by the rotating balls. The lay shaft on the first floor, which drives the sack hoist. And, the rotating grader on the top floor for sieving and grading the flour

These belts are made of fabric

which is flexible enough to go around the pulleys hundreds of times every hour in the case of the tendering device, and strong enough to transmit the power needed to drive each piece of equipment. They are

between two or three inches wide, (50 to 75 mm). Photograph 1.

To fit them they usually have to be split, to go around the pulleys, which in turn means they have to be re-joined. This joint or hinge has to be flexible to pass around the pulleys when the belt is running, photograph 2.

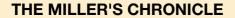
Periodically the hinges, the weakest part, break and need to be remade. This is done with a clenching device which is used with a bench vice. photograph 3. This device

> inserts into the ends of the belt the hinge staples as the vice is closed, photograph 4. Finally, the two ends of the belt are drawn together to form the hinge and the "cat gut" hinge "pin" is inserted to join the two ends, photograph 2.









By Dan Tarrant-Willis dantarrantwillis@yahoo.com

A question I'm frequently asked at This year's production of our milling demonstrations is how I super flour to date is became a miller. I say that I was originally involved as a warden  $(11,222\frac{1}{5}lb Ed.)$ and that it was really a throw away comment made by one of the millers, at that time, that got me started. The miller simply asked me if I'd like to have a go. I couldn't think of a reason why not so I said yes.

I spent the autumn and winter of 2016 watching and trying to make sense of the process. There was something I liked that is similar to my love of sailing. Like sailing, you are harnessing a natural

power, and like sailing, once learnt can feel therapeutic and meditatively calming; a cognitive state social psychologist's refer to as 'flow'. After three years I can't imagine not being a miller

and would recommend others to have a go.

The one question I'm never asked at milling demonstrations is why I'm a miller.







5,090.31kg.

### WENDINGS by Wendy Reid

**Back soon** 

#### **HAVING A PRIVATE DO?**

Did you know you can book **Woodbridge Tide Mill** for your own private evening function, for as little as £110.00 (see below), subject to availability in the mill's Events and Appointments Diary.

Contact Dan at <a href="mailto:enquiries@woodbridgetidemill.org.uk">enquiries@woodbridgetidemill.org.uk</a>
(Friends of Woodbridge Tide Mill are charged £100.00 plus £10.00 for clearing and reinstating the counter area.

for clearing and reinstating the counter area.

The general public are charged £125.00 + £10.00.

There are three optional extras, such as wheel turning, milling demonstration and guided tour, that total £35.00 if all are possible and included.)

#### **Diary Dates for 2019**

#### **Wheel Turning and Milling Demonstrations**

**Water Powered Milling Demonstrations** will take place in October on the 5th at 11:00, 6th at 12:00, 12th & 13th at 16:30, 18th to 21st at 11:00, 22nd at 12:00, 23rd at 14:00, 24th At 15:00, 25th At 16:00, 26th & 27th & 29th at 16:30.

Water powered wheel turning will **NOT** take place on the 1st, 2nd, 14th to 17th and the 28th, because a tide mill has to work with the low tide, not with the time, and on these days low tide is not during our opening times.

Check this link for times on all other May days: Turning & Milling

Other Events

Halloween at the Tide Mill with The Company of Four

31 October & 1 November. 16:30 - 21:45

For full general mill working times use this link to the website: Turning & Milling

Correspondents: all copy for next month to be sent to <u>WTMeditor@gmx.com</u>
by the middle of March please.

PURPOSE: The purpose of this newsletter is to support and advance the objectives of the Trustees of Woodbridge Tide Mill. The newsletter provides all supporters a forum of their own, together with information about current and future events and it is hoped it will foster a sense of common interest and shared identity;p, encourage increased participation and entertain.

EDITORIAL POLICY: The editor has full editorial responsibility for the newsletter. Articles that appear and views expressed are not the official position of the Trustees on any subject, unless specifically noted as such. Items submitted for inclusion may be edited for grammar, style and/or space requirements and contributors wishing to be alerted of any changes prior to publication must notify the editor at the time of submission.

IMAGES: Unattributed images are by the article author or Ed.

DISCLAIMER: The Glenn Miller gag cartoon does not make a comment about any real helpers at WTM.

#### Other Tide Mills Worth A Visit

Woodbridge was the last commercially operating Tide Mill and, out of an apogee in excess of over 200 in he UK, is now one of only two Tide Mills still producing flour for retail to the public, the other one being at Eling, on the edge of the New Forest in Hampshire.

Use these links for more information:

Eling Tide Mill, Hampshire

<u>Battlesbridge</u>Tide Mill, Battlesbridge, Essex (converted for business)

Carew Castle tide mill, Pembrokeshire

<u>Thorrington</u> Tide Mill, Thorrington, Essex

<u>Three Mills</u> tide mill, Bromley-by-Bow, London (aka House Mill)

<u>Clock Mill</u> tide mill, Bromley-by-Bow, London (aka part of Three Mills)

Go to Wikipedia for more

#### WHAT IS IT? ANSWER



The small gear wheel on the right is the gear wheel which is lowered manually to allow the Mill Wheel to drive the water stones.







