



MILL BITS

The Newsletter of the CRANBROOK WINDMILL ASSOCIATION

April 2023

Chairman: Nick Vinall, Secretary: Andrew Riddell, Treasurer: Susan Hooper

Peter Bourne

Few charities are fortunate enough to have a qualified accountant as Treasurer so CWA was very lucky in this respect when Peter joined in 2004. Most members had no idea about the time Peter spent collecting, checking and banking the donations and shop takings every week of our season. Our annual accounts were always immaculate and professional with rigorous analysis of donations and visitor numbers for different days (Saturdays, Wednesdays, Bank Holidays etc)



He also took on the important but often dull tasks such as Health and Safety, Safeguarding, the legal aspects of our relations with KCC, and Russell's Yard neighbours, plus Publicity, which included the Wheels of Time project for children. When Covid led to visitors being less likely to carry cash for donations, he investigated and converted us to be able to accept cashless card or mobile donations and online banking. However, Peter's real love at the Mill was having the sweeps turning, particularly for milling. He was one of our qualified millers and organised regular training sessions over the winter months for other members to learn.

Peter's contribution to the Kent Windmills group was widely acknowledged and at their recent meeting they held a minute's silence in appreciation of it. In condolences to Peter's wife Jackie one had written "Peter was a really nice man and it was a privilege to know him. He will be sorely missed." We all agree wholeheartedly with that sentiment.



Welcome Sign

This lovely table decoration has appeared on the table in the reception area of the mill to welcome the visitors who visited the mill over the Easter weekend. I'm told it was made by Linda so many thanks to her.

Maintenance Report – from the Chairman

Sweeps.

Despite promises by the millwrights you may have noticed that two of the sweeps are still missing about 20 shutters each at the outer end. Although the sweeps can free-wheel in the wind there is not enough power for grinding. The missing shutters have been fabricated so it's just a question of Luke Bonwick, KCC's Mills Officer, cajoling the millwrights to make space in their busy schedule to finish the work.

Other work

Other small snags have become apparent and need remedying. These include alignment of the striking mechanism, balancing of the sweeps, the brake mechanism, the fantail brake, the sack-hoist, and other work in the cap. Luke is providing the services of another millwright, Cameron Southcott, for 12 days to work on these issues. He has been twice already and seems excellent. He has had a major role in the refurbishment of Upminster Mill which some members visited in March. - see report later.

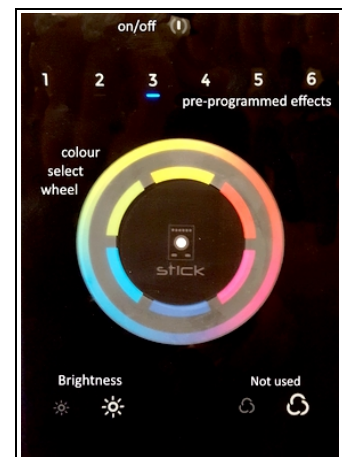


<< Cameron perched aloft (blue hard hat)

Spotlights

The old 'traditional' flood lights have been replaced by new multi-colour LED ones. Not only do these save 80% of the electricity usage but they can be programmed to display different colour combinations at the touch of a button. We can change them from all white to Ukraine

(alternate yellow and blue) or Coronation (red, white and blue), and three other possible combinations. Each 'flood' unit lights one face of the Mill by a line of 48 LED cells, 12 each of red, green, blue and white that can be selected individually. Tiny lenses squirt a thin 60 degree wide fan of light up the face with very little light wasted. Combinations can be programmed. For example a yellow face is created using the red + green LEDs. If all faces are lit the same many thousands of colour variations are readily accessible.



The expected lifetime of each LED is 100,000 hours, about 50 years of our 5 hour average usage per night. Kick boards prevent damage by visitors walking carelessly around the Reefing Stage.

Peter Bourne spent nearly 4 years working with our lighting consultant, interrupted by KCC's

refurbishment plans and Covid. It's a great shame that he never saw the lights in action. The CWA Committee at its next meeting will consider naming them the Peter Bourne Lights.

Mill Cleaning

At the end of each season, the mill is given a thorough clean. November 5th was the date chosen last year and just before 10am about a dozen members gathered, some armed with their own vacuum cleaners, brooms, and dustpans and brushes. The grease monkeys had a short briefing by our chairman on how to grease the gearing on the fantail

and floors were then chosen. For a good hour and a half, the mill echoed to the sound of vacuum cleaners. The first job, however, was to sweep up the hundreds of dead flies, which had sought refuge from the cold, and to “squidge” the dozens of not so dead ones.

AND **MORE** Cleaning on 28th March 2023 - but no “squidging” this time.

Men with Hoovers



Every speck of dust must go.



Now, where was I going?

CWA Visits Upminster Windmill - David Hall.



On Tuesday 21st March, twelve CWA members braved the M25 and Dartford Crossing to visit this smock mill located in the borough of Havering (previously Essex). As we drove up to the mill near the busy town centre, the sails (as they are called north of the Thames) were free-wheeling in a light wind, a splendid sight.

Built in 1803, originally on 23 acres of land, the site eventually included the mill and outbuildings with a granary, a meal house to store flour, a pair of cottages. There was also a steam powered corn mill with two additional pairs of stones, the engine also driving machinery in the windmill via a 30 ft shaft. These outbuildings eventually became derelict and were demolished in the 1960's but the outline of them is marked out on the ground so you get a feel for the size of the enterprise.

The windmill has had a major restoration programme over the last six years carried out by Dutch millwrights, funded mainly by The Heritage Lottery Fund and Veolia Environmental Services. The restoration is to a very high standard, in fact it almost looks like a new windmill with original machinery installed, some of which was invented or modified by the miller, Hector Stone, in the 1940s/50s. The Friends of [Upminster Mill](#) and our host, Cameron Southcott, are in the process of understanding and restoring these novel features.

The mill has four sets of stones which are 'under driven', ie the Great Spur Wheel and Stone Nuts are located on the floor below the mill stones, as they are in watermills, rather than on the same floor as in the Union Mill. Although not as tall as our mill, the floor space is greater making it easier to move around. The Cap itself rests on small rollers rather than sliding on greased metal to metal as in Cranbrook mill.

After looking over the mill, we toured the fairly new visitor centre (right) which contains a superb workshop with lathes, metal milling machines, drill-stands, etc. This is manned by Friends of Upminster Windmill, skilled in metal and woodwork. Apart from their mill, they carry out work for other mills, such as currently, refurbishing shutters for Stelling Minnis Mill.



The visit concluded with a look at the attractive mill garden, tended by Friends of the Mill. All in all a very worthwhile visit, highly recommended. Our thanks to the Friends of Upminster Windmill and especially Cam Southcott who kindly invited and hosted us.

Digital Telemetry for Traditional Windmills

We had some problems some years ago with the cap sticking, always a potential hazard with windmills. Some clever members of the Friends of Upminster windmill have



developed a solution. Their website explains it as follows: "Digital sensors installed in the mill's cap measure its orientation and transmit data to the smartmolen system, which checks the readings against observed and forecast wind conditions. Alerts can be sent via SMS text message when the system detects a tail wind situation or foresees the risk of one."

<< Device installed in the mill at Upminster

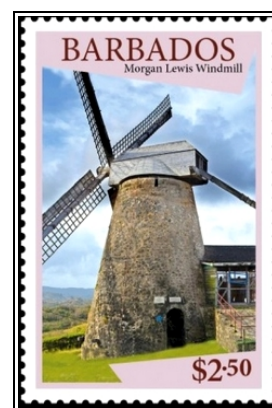
The Friends of Upminster Windmill won the BAFM Impact Award 2021 in recognition of the benefits of this technology for both preservation and visitor engagement.

If you would like to check the Union Mill's orientation, you can visit www.smartmolen.com/cranbrook

It also tells you that at the moment it's a few degrees cooler inside the mill than outside, as the stewards discovered over the weekend!

Windmills on Stamps

Following on from the June 2022 issue of Mill Bits, the Barbados Windmill used to crush Sugar Crane also appears on a postage stamp.



Final Bits

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