

30 years as custodians of Buckland Windmill – the UK's only surviving wind-powered sawmill

Duncan Ferns

It was 1994 and we'd just bought a house, built around 1700, with a "shed, former windmill" in the garden. Prior to purchase we had not set foot inside this "shed". Only after moving into the house did we explore. The ground floor was the coal store with 20-30cm of coal dust over the earth floor. Up the wooden stair ladder, under decades of grime, thick spiders' webs and a couple of desiccated mice, were four shuttered sails, various cogs and patterns, and weatherboards for the cap. The flat lead roof had been nailed on to the boards beneath. As a consequence, the wooden roof was entirely rotten, together with many of the floorboards beneath.

Early days 1994-96

When we first took ownership of the "windmill shed", I thought it was a folly and applied for membership of The Folly Fellowship (follies.org.uk), a brilliant society of eccentrics, landowners and no doubt, eccentric landowners, who own follies. I waxed lyrical about our folly, mentioning that as a windmill, "it seems designed to work". I was politely informed that our building looked quite utilitarian and workmanlike, whereas follies are generally built for their aesthetic qualities: "pleasure before purpose". They advised that "it did not really qualify as a folly".

So, if it was "designed to work", I thought we should at least ask someone about it and tracked down the SPAB Mills Section to whom I wrote a letter. The following weekend, in January 1995, we were visited by two Mills Section Committee members, Jim Woodward-Nutt and David Jones. Driven by the fact that this was not a known windmill – a "new discovery, probably a little sawmill" – their enthusiasm for our wreckage spilled over to us. My wife also liked the idea, so we had to restore it.

We joined the SPAB Mills Section in 1995 and started to spend our weekends visiting lots of windmills, attending SPAB Mills meetings and reading about sawmills elsewhere. Our kids, then 11 and 13, saw more windmills in a couple of years than most see in a lifetime, including a visit to the Netherlands and Zaandam Paltrok Zaagmolen (sawmill). In terms of scale, we were a dinghy and Zaandam was the QE2! I did however learn about vertical reciprocating saws, circular saws, loading timber from barges and lots of clever means of converting massive trees into planks. I was introduced to the journal, *International Molinology* and Jur Kingma's excellent treatise *Those Great Wooden Engines on Dutch industrial windmills*¹, *How Dutch Windmills Cut Timber* (Durst²) and my library of windmill books grew to fill a shelf. Included in my book collection was Farries & Mason's *Windmills of*

*Surrey & London*³ (1966), apparently comprehensive in its 276-page coverage, but missing our mill. Even more surprising was that Kenneth Farries, profiled in *Mill Memories* (2007), was a geography master at Reigate Grammar School, just three miles distant and where our kids went to school.

In March 1995, we were visited by a pleasant gentleman from Brighton, laden with a large camera bag. He went upstairs while I finished a cup of coffee downstairs. A few minutes passed before there was a loud crack and a shriek, and a whole leg appeared dangling in front of me. "I think this floorboard is a bit rotten," said the voice from above. Shaken but not stirred, this chap was Frank Gregory, who I later learnt was a stalwart of the Mills Section. He died in 1998 and left a great legacy for the Mills Archive. Nine photos of Buckland Windmill from his 1995 visit are now in the Mills Archive collection. The first public exposure of the mill was a mention by Jim Woodward-Nutt at the Mills Section Spring Meeting in 1995 and in the SPAB Wind & Watermill Section Newsletter.⁴

The mill could hardly be seen from the adjacent road as just 50cm from its base was a 15m high yew tree, one of nine in our garden. The bushy evergreen crown of the yew almost entirely screened the mill from the road. Following planning permission, the tree was taken down. Restoration could begin.

The restoration

We needed help. The SPAB put me in touch with that rare species, an "architect who does windmills". Howard Jones had recently completed architectural drawings of several windmills in Kent and was willing to help us out. The challenge was to generate scale drawings of (i) the structure, (ii) each of the individual components and (iii) a

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drawing with all the components fitted together! Rather like a 3D jigsaw without the pattern. We had not found any old photos of the mill with its sails on and this is still the case today. Howard pointed out that while we had all the bits that hang on the cap frame, we didn't have the cap frame itself. This strongly implied that sometime in the past the top may have blown off and broken the frame; perhaps the reason it had never been put back.

Phase I (1996-98)

With beginner's enthusiasm, in 1995 we started what we now call Phase I of the restoration. This saw the replacement of rotten timbers, a rebuilt tower section and repairs to windows, doors and weatherboarding, coated in traditional coal tar. A new flat roof was recovered in lead by a local contractor. Cleft oak shingles were sourced and added to the tower and pitched roofs, and a York-stone floor was laid. This work made the structure watertight and safe.

Phase 2 (1998-2002)

We applied for and received Grade II listing of the windmill from English Heritage and this helped to obtain grants from Surrey Historic Buildings Trust, Mole Valley District Council and the BAA Gatwick Environmental Grants Scheme.

On a visit to Cranbrook Windmill, we saw a 1/10 scale model of the Cranbrook cap. I'm sure if I'd picked it up and taken it home it would have fitted on top of our mill. "Who made that?" I asked the volunteer steward. The answer was Colin Eagles, a model maker of Tunbridge Wells. We commissioned him to build one "almost like that in Cranbrook", but designing a frame to fit all the parts that we had in storage – including the sails, winding wheel, fantail, brake wheel, brake, brake lever, etc. Colin did a great job in his garage at home, following Howard's drawings with minor adjustments.

Tony Hole of Dorothea Restorations advised us on the fitting of the cap, lineshaft, belt-drive wheels and electric motor. The wallower and curb-gear teeth, for which we had the wooden patterns in storage, were recast. We were able to paint and refit the sails, without repair, in 2001. Many mill owners are amused by our scaled-down patent sails. Each sail is only 3.6m long, with 60 alloy shutters, each shutter measuring just 21 x 9cm!

Phase 3 (2003-04)

Phase 3 was partially funded from a Rural Enterprise Scheme Grant from



The mill seen on a postcard from 2016.

Defra (UK Department for Environment, Food and Rural Affairs). Phase 2 involved adjustments to restore full working of the sails, installing electricity, setting up an iron saw bench and lathe to be driven from the wind-powered lineshaft and production of display boards for visitors.



The cap undergoing maintenance in 2024, before painting.

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The tower showing the patent sails, in 2024.

A lathe (Drummond Brothers of Guildford) and saw bench (Kirchner of London & Leipzig) were offered by local people who visited our open days. Both were installed to work with belts from the lineshaft. The saw bench is c.1900 and the lathe 1912. They will work under wind power and have a good turn of speed for workshop use on small timber. For demonstration purposes, we also installed an electric motor, which powers the lineshaft and hence the belt-driven circular saw and lathe at a slower speed, with the sails disengaged via a clutch mechanism.

During this phase we employed Vincent Pargeter, who first came to help us at Buckland Windmill in October 2002. This was followed by numerous short maintenance visits, the latest being in August 2015, just two months before his untimely passing. Vincent is sadly missed. We continue to struggle to find any professional millwright support for just a few days' effort each year.

For the past 10 years, I have been doing my own maintenance, with respect to painting and wood preservative in a six- to seven-year cycle, greasing bearings, repairs to woodwork, etc.

Awards and publications

The restoration work resulted in two awards, from the Surrey Historic Buildings Trust in 2003 and Surrey Industrial History Group (SIHG) in 2004. Each organisation gives only one award per year and it was a



The Kirchner saw bench in 2020.

real privilege to have double recognition following selection by their judging panels, on the first time of being nominated for the competitions.

In 2008, SIHG published a booklet (Crocker, 2008) of all the awards during this period, putting Buckland (proudly) alongside previous "big windmill" winners at Outwood (1984) and Lowfield Heath (1995). We have had press coverage in the *Dorking Advertiser*, *Surrey Mirror*, *Surrey Life*, *Surrey Monocle*, *Vintage Spirit* magazine and *50 Treasures of the Surrey Hills* (2021). Buckland Windmill is also recognised as a local feature in booklets and websites for Walks in the Surrey Hills. We also had a brief mention in Roy Gregory's 2005 volume on *Industrial Windmills in Britain*.⁵

Context

Some experts have doubted the originality and date of the windmill, but if you understand the context of its origin and position, it is, in our view, without doubt:

The Property has been the Estate Sawyer's house from 1713 to 1955...

The windmill is in the garden of Yewdells, a Grade II listed house built in 1713 for John Udall, from which the house name is derived. The house was then owned by Buckland Estate and rented; John Udall was the estate carpenter who trained apprentices. Three generations of Udalls managed the business before it passed to the Sanders family around 1840. From 1840 through to the 1950s, five

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Yewdells House.

generations of Sanders ran a sawyer's business from the site. Thomas Sanders (1835-1917) would have built the structure of the windmill, using whatever timber they had around. This would explain the fact that several braces are of reused timbers, with mortices cut out from a previous life, and that the upper windows are reused and-refitted. Thomas's son Frank (1867-1955) continued the business on site. Frank had three daughters and the youngest, Elspeth, continued to live at Yewdells until 1985.

There is another (long!) story about the traction engines that were on site at Buckland Windmill. In brief:

- in 1892, a Robinson & Auden engine (No.1032) was purchased new to saw wood;



The windmill across the garden of Yewdells House.

- in 1900, a Wantage traction engine (No.1389) was purchased to saw wood.

Both engines remained on site until 1955 and still exist in restored condition, with owners in Germany and Hampshire.

Steam power made the windmill rather redundant, so Buckland Windmill may only have operated from c.1870 to 1892, though it may have continued as a small "bench-type" workshop.

We have a photo from c.1905 of the Wantage engine linked to a large outdoor saw bench on site. The Buckland woodyard layout is recorded in the house



Two views of the tower in 2024.



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deeds of 1924, showing a plan with five outbuildings: carpenter's workshop, blacksmith's workshop, open timber shed and stores, paint shop, cart shed and motor shed. We have several photos from 1955, when both traction engines were still on site adjacent to the windmill. Frank Sanders is described in the local Kelly's Directories (Reigate & District) from 1900-1935 as a "steam sawyer". The steam engines remained on site until Frank Sanders died in 1955.

The casting in the windmill identified the millwright and hence the date...

While Thomas Sanders almost certainly built the mill structure, he had help. Within the windmill is a mounted cast-iron plaque, "W. Cooper, Engineer, Henfield". Cooper was a millwright, whose activities were researched and published by Don Cox in 1990⁶, before his involvement at Buckland was known about. Cooper operated his business from 1862 after separating from a partnership with James Neal. In 1869, he was shot by his son Henry, who was subsequently sentenced to 20 years' penal servitude. William Cooper was badly injured, but recovered to work for a further seven years, when he died prematurely in 1876, aged 51.⁷ Death is a good dating mechanism, so we can safely assume that he gave his attention to Buckland Windmill in the period 1870-76, when similar mill castings also describe him as "Engineer". William Cooper is associated with work on windmills at Clayton (Jack), Ashurst and West Chiltington, as well as Buckland; six watermills in Sussex carry his name on castings and he worked on a further six watermills.⁶

Access

The windmill can be viewed from the road (Dungates Lane, Buckland, Surrey RH3 7BD) in the garden of Yewdells. The windmill and our half-acre garden are open by appointment for group visits and interested individuals. Since 1998, we have opened most years for Heritage

Open Days (HODS, in September) with display board exhibitions and demonstrations. During autumn 2025, I will be transferring a batch of digital documents and photos of Buckland Windmill to the Mills Archive, which will make them available via its website.

References

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Thank you... to members of the SPAB Mills Section for the encouragement, advice and networking throughout the 30-year period of our ownership. The process continues, when I asked questions of Peter James recently! It is sad to reflect that many Mills Section members who have helped us over the years have now passed. I hope that mentioning their names is reinforcing their legacy.

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