

FLOUR POWER

Quinton Windmill Society, Buckinghamshire



Source: <http://www.aylesburyvale.net/visit/tourism/south/info/mills/quinton/index.htm>

Rising above the village of Quinton in the Buckinghamshire countryside, the local windmill is a physical landmark and focal point. Restoring the windmill is a labour of love for the Quinton Windmill Society, but can they involve the local community, utilise green energy to mill flour and break even as well?

The Quinton Windmill Society in Buckinghamshire was formed in 1974 with the object of restoring the local windmill to its former glory. Construction of the original windmill began in 1830 and was a model example of using local materials: the bricks for the windmill's tower were fired in a kiln set up near the mill, with the clay coming from a nearby area. The mill, which was used to grind grain into flour, only operated for about 50 years before it was left to become derelict. By 1914, the engine and boiler were sold for scrap along with the pair of milling stones.

The building today, although basically sound, is undergoing major restoration work by the society. Previous remedial work has been undertaken on the sails (the wings of the windmill that actually turn around in the wind), the cap, shaft and headframe. This has included renewing all the floors, repairing windows and rebuilding the gallery. In February 1997, for the first time in over 100 years, the mill once again ground grain into flour. Although there is electric light and power for tools, the actual milling process totally depends on windpower, which is generated by the large sails, which weigh about one tonne each, on the front of the windmill. As part of the restoration the sails had to be rebuilt (twice, as the second-hand timber rotted the first time) and then hoisted into place.



Source: <http://www.engineering-timelines.com>

A GrantScape Services team, which supports community environmental projects, identified the problems for the Grade 1 listed building. The Society then contracted consultants and other

experts to help restore the windmill and make it a more accessible and inviting visitor experience. For example, the society has called on help from a retired millwright to set up the stones correctly and to advise it on other matters such as where to source paper bags for the milled flour, what scales to use and how to clean the interior of the mill. The first stage of restoration started in spring 2005 and the windmill will be fully operational in autumn 2006.

“The hardest part has been learning what we were doing as we went along because all of us were ignorant of what was involved when we started in 1973.”

Patrick Tooms, from the Quainton Windmill Society

The society is keen to involve local villagers, and in fact everyone who has been involved in the restoration project, apart from the millwright, is an inhabitant of the village. The windmill is still very much a local family affair – the present millowner and Society Life President, Mr Colin Dancer, is a descendent of Mr James Anstiss who started building the windmill in 1830. Local builders have been very generous in loaning equipment to the society to use for the restoration. Patrick says that the “community response has been one of amazement and often support....though the perception by some is that its all a bit strange!”

The society has won grants from various sources to help restore the mill, but hopes to make it self-supporting with income from visitors and from people buying flour. Currently, while work on the mill proceeds, the building is open to the public on Sundays between 10am and 1pm.

“To secure the Mills future,” says Patrick, “we’ll need to continue finding people who are interested enough to keep the mill going. To succeed with this, I think we may have to get more advice on how to engage local villagers.”

Facts

- English Heritage and Government research illustrates that restoring or conserving local heritage sites or buildings can improve a local environment and neighbourhood. **Caring for heritage improves public understanding, increases how they value it and their level of enjoyment.**
- The first windmills were developed to automate the tasks of grain-grinding and water-pumping and the earliest-known design was developed in Persia about 500-900 A.D.
- **Wind power is a clean**, renewable source of energy which produces no greenhouse gas emissions or waste products. (Source: BWEA, *Embrace the Revolution*)
- The average wind farm will pay back the energy used in its manufacture within 3-5 months of operation. **A modern wind turbine is designed to operate for more than 20 years** and at the end of its working life, the area can be restored at low financial and environmental costs. (Source: BWEA, *Embrace the Revolution*)
- A modern 2MW wind turbine will supply enough electricity for 1200 to 1500 homes and save over 4,000 tonnes of CO₂ emissions annually. (Source: CSE)
- **Three-quarters of the British public agree that wind farms are necessary to help meet future energy needs.** (Source: GfK NOP ‘Wind Tracker’ study).

Further Information

- To find out more about how caring for heritage or the environment can improve community participation and the local area, check out GrantScape (www.grantscapes.org.uk), English Heritage (www.english-heritage.org.uk/server/show/nav.8490) or contact the Federation for Community Farms and City Gardens (www.farmgarden.org.uk).
- To find out more about energy projects for your community including funding support, training, contacts, advice and more case studies, contact the Community Action for Energy Team (CAfE). Call them at 08701 261 444 or email CAfE@est.org.uk. You can also find them online at www.est.org.uk/cafe.
- To find out about the wind resource in your postcode area use the model estimates produced by the British Wind Energy Association through their website: www.bwea.com/noabl/
- To find out more about some facts and myths associated with wind power then visit the British Wind Energy Association 'Embrace the Revolution' site: <http://www.embracewind.com/myths.html>.