

# Heckington Windmill

The only surviving 8 Sailed Windmill

## A Visitor's Guide



We hope that this leaflet will help you make the most of your visit to Heckington Windmill

[www.heckingtonwindmill.org.uk](http://www.heckingtonwindmill.org.uk)



Heckington Windmill

## History & Power System

Heckington Windmill is the sole surviving eight sail windmill in the country.

It was built with five sails in 1830 by Michael Hare who died soon after. His widow married Sieightholme Nash who ran the mill until his death when it passed to his eldest son. He had other interests so the mill was rented to various millers but little care was taken with maintenance and the mill was wrecked by a storm in March 1890.

It was bought by John Pocklington who repaired it using the sails, cap, fantail, etc from Tuxford's mill in Boston. It ran from 1892 to 1946.

Kesteven County Council bought the mill from the Pocklington Family in 1953 when it was Grade I listed. It passed to Lincolnshire County Council in 1974. The Friends of Heckington Windmill formed in 1987 and operate the windmill on behalf of the Council. They have been producing flour since 1987.

Heckington mill has the largest inside base diameter (8.5m) of any mill in Lincolnshire.

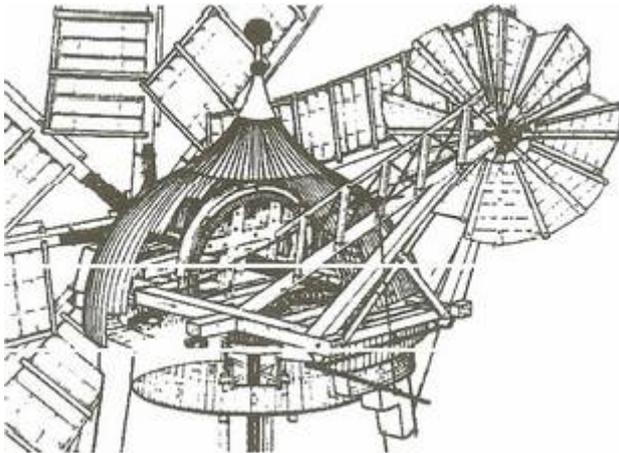
Height to top of bricks is 18.3m

Length of sail backs is 10.36m

The sails span nearly 21.3m

Height to the top of the top sail is 30.5m

Eight sails rotate in the wind to provide power to drive the grind stones. The shutters are hinged so they can be opened to spill the wind when stationary, or closed to provide a solid surface to the wind when working. They are opened or closed by a chain which hangs down to the stage and are held in either position by a weight.



Each sail is bolted to an iron cross which is mounted on an iron windshaft.

Fixed to the windshaft is a wooden drive wheel 2.44m in diameter which has wooden brake shoes round it and is called the brake wheel. The brake wheel is fitted with 80 iron teeth which engage with 40 teeth on the crown wheel at the top of the vertical shaft which drives the great spur wheel.

On the opposite side of the mill from the sails is the fantail. If the wind blows on the side of the fantail it will turn and, through a series of gears, will rotate the entire cap, sliding on a greased curb, to face into the wind.

## The Ground Floor

This floor is raised to cart level for easy moving of grain by sack barrows. A granary on one side was used for storage and on the opposite side the Eight Sail Brewery has replaced a former saw mill containing two circular saws and a frame saw, all powered by the sails.



The connecting doors to both are currently bricked up.

The metal hopper of an animal feed mixer can be seen and there is a bolter still used for separating wholemeal flour into white flour, middlings and bran.

A former fifth pair of stones was probably situated on the south side.

Traces of a repaired hole can be seen where a power shaft probably came through the wall from an oil engine to run the stones in calm weather.

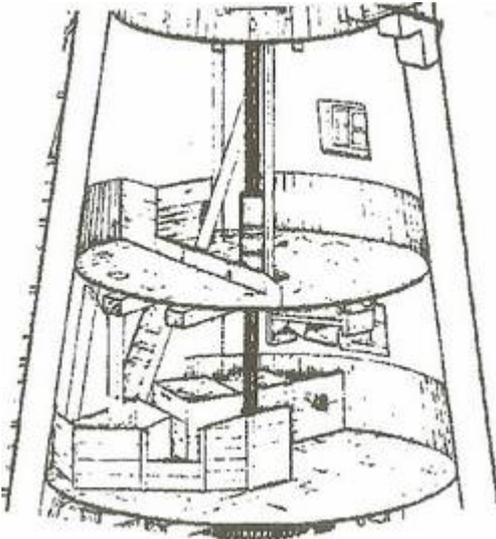
There is a display of milling memorabilia, model mills and a video of the mill working on the north side.

The wind powered chain sack hoist is still used to carry grain to the upper floors.

For your tour we suggest you follow the grain by now climbing to the upper bin floor at the very top of the mill.

## The Upper Bin Floor

This is right at the top of the mill. Grain and pulses are hauled to the bin floors on the chain sack hoist.



There is a bin on this floor for feeding the smutter, or grain cleaner below.

If you look through the east window you will see a view that has barely changed since the mill was built in 1830.

If you look up you may be able to identify the crown wheel at the top of the vertical power shaft, the iron wheel which provides power to the Y wheel of the sack hoist, the huge iron wind shaft and the brake wheel with its wooden brake shoes as described on page 3.

Most of this machinery was brought from Tuxford's mill in Boston in 1890. Tuxford's mill was built in 1813.

## The Lower Bin Floor

On this floor there are four bins for storing grain ready to feed the mill stones on the floor below.

There is also a smutter or grain cleaner which is fed from the floor above. The smutter contains an adjustable wire spiral which is rotated by a shaft powered by the great spur wheel on the floor below.



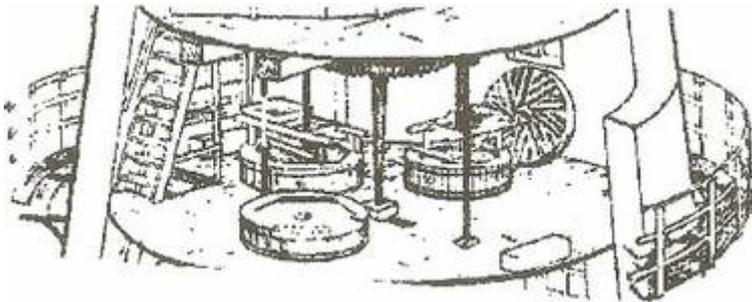
As the spiral rotates, any dirt or rubbish falls through the gaps so that only clean grain comes out of the spout at the end. With modern farm hygiene this is no longer needed.



Grain for milling is still stored here in paper sacks. This is local wheat which has been cut by a reaper binder and threshed by a threshing machine powered by a traction engine at our annual threshing day.

Paper sacks are used because they keep out insects better than hessian sacks.

## The Stone Floor



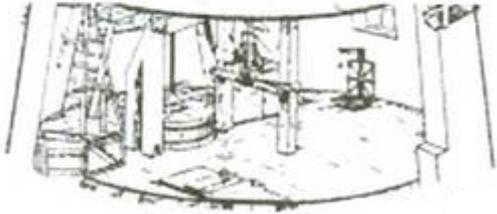
The power shaft from the crown wheel drives the cast iron Great Spur Wheel which is 2.28m in diameter. Smaller Stone Nut wheels with wooden teeth can be engaged with it when it is stationary. Each stone nut drives a cast iron quant which drives the top or runner mill stone.

Each runner stone is supported by a spindle from the floor below which maintains a narrow gap between it and the stationary bed stone.

Grain from the bins on the floor above travels down a chute into a hopper over the stones. The grain falls from the hopper into the shoe which rattles constantly against the quant. The vibration causes a steady trickle of grain to fall into the eye of the stone.

After being ground, the flour escapes from the edge of the stone and falls down a hole inside the casing into a meal chute which leads to the floor below.

## The Meal Floor



Meal, to a miller, means any product of milling.

This is where the meal chutes terminated in five sail days but they were extended to the ground floor in later times to be handy for the miller handling sacks on the ground floor.

As an eight sailer the extra power led to an extra pair of stones being installed here and in 1936 a mixer was added, filled on this floor, to mix balanced rations for pigs and poultry.



The governor in the centre automatically adjusts the gaps between the pairs of stones above according to the speed of the mill which varies with the speed of the wind. This ensures even quality of product once the initial gap has been set manually.

We hope you enjoy your visit.  
Guided tours are available most weekends



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