

NORTH AYRSHIRE WATERMILL SURVEY

Name of mill: North Kilruskin

Date visited:

1st visit 26.4.10.

2nd visit 13.1.11.

Address: By West Kilbride.

Grid ref: NS207509

Surveyed by:

1st visit. Alastair Weir.

2nd visit. Alastair Weir and Ishbel MacKinnon, officer from the Scotland's Rural Past project at RCAHMS

Present use: Part of a working farm. Mill building used to store grain/feed. Some of the original equipment, modified, is still in use. The site was identified 'by word of ear.' It is difficult to determine the site on the 1st edition OS and for that reason the site was missed out in the original study of the maps.

Description of buildings: Measurements were not taken at time of visits. An 'L' shaped building with internal wheel. The short leg of the 'L' is a later addition. At one time the wheel may have been open but later enclosed, that is, within a 'lean to' type wheel house. The roof is of corrugated iron. What is not known at this time is whether the wheel house was there before the extension or was built at the same time. The building is two storeys in height and set slightly into the ground at the east gable.

It is of random stone construction with dressed stone at doorways, windows, corners and on the pitch of the roof at the east gable. (To retain the slates)

Wheel: Enclosed overshot. Approximately 3.6m diameter, square cast iron axle as are the felloes. Spokes wood, wooden paddles covered, in most places with formed sheet metal. Width is approximately 750mm. Metal rod 'braces' tie in the wheel. No makers name plate visible. Wheel bearings still in place. Wheel could still be moved, ever so slightly, by hand.

The metal trough to carry the water into the wheel house and onto the wheel is reasonably intact though badly rusted. What appears to be a control, a toggle arrangement, to open/close a 'trapdoor' on the trough still remains.

Attached to the felloes on the side of the wheel nearest the mill is a ring gear, that is, segments of cast gearing, joined together, that encompass the circumference of the wheel. In effect the waterwheel is a rather large gear wheel. This directly drives a smaller gear, approximately 450mm diameter, which in its self, drives a belt wheel within the mill proper.

Machinery: A number of pieces of machinery and equipment are to be found within the mill. On the top floor is a metal Drummond threshing machine which was driven by a

belt wheel. On the same floor on the west end of the building is a seed dresser/fanner. This item of machinery was belt driven from the wheel at one time. This area is still used by the farmer to store seed. On the same floor is an original bruiser, once powered from the waterwheel, but now driven by electricity. This piece of machinery has however not been used 'for a while.' The farmer still bruises seed albeit with more modern equipment. Various other mill items of equipment are still evident including additional pulley wheels, belt elevators, (for moving grain,) still within their wooden casings, hoppers and chutes. A straw cutter was also belt driven the straw being used for the horses.

Water source: What appears to be a solid concrete dam is still intact albeit the spillway has collapsed just beyond the lip of the dam. This has resulted in erosion on the soil area of the dam face. Eventually this process will undermine the structure of the dam. The pond area is silted up with typical wetland vegetation. The burn that fed the pond still runs through the area.

What appears to be a sluice to control the water level in the dam still exists. The sluice control wheel and shaft is still insitu albeit much rusted. Water from the over flow from the dam runs down to the mill area. At the point where there was a sluice, only the grooves to support the sluice remain, to direct the water towards the wheel concrete shuttering now ensures that the water flows passes by and shortly after that disappears underground. The burn, near the farm, is lined with a stone wall on one side to prevent flooding of the farmyard and buildings

The channel that used to take the water to the trough is stone lined until it reaches the beginning of the outside section of the trough. The trough is supported by a brick pier and, interestingly by a large diameter fireclay pipe. The metal trough is in sections bolted together.

Other buildings: Associated farm buildings and farm house.

Photographs taken: Yes on both visits. Photographs are also said to exist with the family.

Notes: Arthur Deans, junior, runs the farm but his father, now in his 95th year, still lives on the farm. He has, on both visits, been a very good source of historical and social information. (I have recommended that RCAHMS records his information.)

Arthur Deans, senior, informed me that the wheel in circa 1907 was an undershot. After that it was converted to an overshot by his father. The estate, the Montgomerie, either paid for or supplied material for the rebuilding of the wheel or the necessary up grading of the dam and pond.

Arthur, senior, remembers the mill being used for threshing, bruising oats and grinding cattle cake. He also thought linseed oil was also produced. 3-4 people worked the mill, usually neighbours lending a hand as necessary. 'Buntle? buntling?' to tie the straw for the cattle. Six bundles fed 12 cows.

He mentioned in our conversation that the mill last worked in the late 1940s but Arthur, junior, who is in his 50s, can remember it working. It was also said that it was 'working

into the 70s, full production.' Perhaps the mill equipment was still working then but powered by electricity. Clarification required.

It would appear that in times of water scarcity or volume of work to be done a traction engine driving a threshing mill was required. On these occasions the manpower required was as follows:

2 men carrying the oats.

2 men cutting the string.

1 working the bags of chaff.

2 forking the sheaves up into the thresher.

1 to carry coal and water to the steam engine.

The farm grew beans which were taken to Sevenacres and Dalgarvan mills. (See entries for these mills.) Oatmeal was also taken to the nearby Seamill. (See entry for this mill.) Arthur, junior, said, when he was a boy one of his jobs was to ensure that water was not wasted. You only threshed 'as much as you needed.' He used to run back and forth from the sluice, nearest the mill, controlling the amount of water required for the wheel. His other job was to fill the chaff bags and move them to a storage area. Being relatively light a boy could 'easily' carry the bags.

From my experience elsewhere this mill could be restored to work again, something that Arthur, junior, would like to see also.