# "Each Mòr Dubh"



The story of Tiree's mills

Tiree and Coll Gaelic Partnership, Summer 2003

## The Mills of Tiree

To make grain more edible, and more easily cooked, it has to be ground into meal or flour. The first Neolithic farmers used a saddle quern which was made up of a lower grooved stone and a rounded grinding stone.

The Romans are thought to have introduced the circular or rotary quern, known in Gaelic as a *brà*, to Britain around 2,000 years ago. One was found in the excavation of *Dùn Mòr Bhalla*, the broch in Vaul which dates from around 0-300 AD. Two women would sit on the ground with the *brà* between them. Grain was fed into a central hole in the upper stone which was rotated by hand using a handle. The ground meal fell out at the rim onto a skin known as *craiceann-bràthan*.



Grinding corn with a rotary quern (I. F. Grant Collection).

This was enormously time-consuming work. Turnbull, in a report on Tiree written in 1768 for the Duke, said "[they] make into meal with querns or hand mills which appears to be an expensive and troublesome method. Two women at once, or sometimes three, are commonly employed. By this means there is so much of their time taken up that it greatly retards them from other industry."

One estimate was that 200 women, about one third of the population of Tiree, were fully occupied grinding corn by hand for three months of the year (R. Dodgshorn, *Chiefs to Landlords*, 1998).

To remove the husk barley was browned in front of the fire and then pounded in a stone bowl or *cnotag* with a stick called a *maide cnotaig*.

The older late-ripening varieties of corn were often damp when they were harvested, and they had to be dried before being stored for the winter. This was done in small stone kilns where either entire stooks or the grain itself was slowly dried over 12 hours. The remains of one of these kilns can be seen in Mannal.

The fire in such a kiln was called *aingeal*, or angel, rather than the commoner word for fire, teine. Father Allan MacDonald recorded the following custom in Catholic South Uist around 1880. "John MacKinnon, Dalibrog, tells me he would not say teine for it on any account... fire was a dangerous thing, and the fire in the kiln especially so. He always blessed it that it might cause no harm. He felt if he should say teine that fire would be apt to come and put the place on fire"

Around 1730 the Duke of Argyll built a water mill at Crossapol, using the waters of *Loch an Eilein* around Island House as they flow down to the sea past the present day Paterson's farm. This was a horizontal, or Norse, mill which had been developed in Scandinavia. A stone building was erected directly over the stream. A horizontal paddle below was turned by the water and this turned the upper of two grinding stones directly. Although mills like these saved many hours of labour they were still relatively inefficient. Grinding corn had now also become the work of men rather than women.

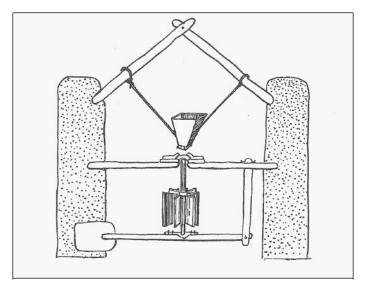


Diagram of a horizontal mill.

In 1768 Turnbull reported that "there is no mill [in Tiree] but one at Crossapol, and at present [it is] not in proper repair...[it] is not supplied with water longer than four or five months of the year, and the fall does not seem sufficient for a mill." Having built the mill, the estate then tried to prevent the use of hand querns on the island.

Tenants were forced, or *astricted*, under *thirlage* to take their corn to the landlord's mill, and pay the miller a proportion of their crop, or *multure*. The miller then paid rent to the estate. Not only was the estate creating a new form of revenue, but the miller now had an accurate record of how much grain tenants were growing. This helped the estate to collect rent (which was paid in grain).

Islanders were naturally keen to avoid this new charge, and the use of hand querns continued for many years.

Because the Crossapol mill was less than successful, the estate built two new Norse mills at Scarinish and Cornaig in 1774. Thirty years later the larger Cornaig mill was built with a vertical water wheel. Place name evidence also suggests that there were around nine other small mills on the island at some time in Caolas, Kirkapol, another in Scarinish, Heanish, Baugh, Hynish, Barrapol (two), and Balevullin (*Bail' a' mhuilinn* meaning town of the mill).

#### Milton

The first miller of which we have record is an Allan MacDonald, "miller in Kelis" in 1788 (Estate Instructions). The MacDonald family were originally from Sorisdale on Coll. Alexander MacDonald (born 1806) was miller from 1835 until at least 1871 when he was 65. His son Gilleasbuig a' mhuileir (Archibald the miller) was the last member of the family to work the mill. His brother Eòghann a' mhuileir had the Scarinish Post Office.

The mill was driven by water from *An Loch Fada* (the long loch). Drains on the crofts in Milton were re-routed to empty into the loch. Although the mill was needed by the whole community, there was often a tension between the miller who wanted to flood the land with as much water as possible and the crofters who wanted to preserve their grazing. But although water backed up almost a mile, the land is flat and it produced little force to drive the water wheel.

Gilleasbuig a' mhuileir wrote the song Madainn Diardaoin about the mill:

Am muileann sin, taigh càthaidh Gun ann ach an larach, Tha feanntag a' fàs, Mu gach garadh 's bruthach, An liath tha traithle, Gun ann ach an larach Mu'n t-sruth sin a b' abhaist, Am brà chur mun cuairt.

Of that mill and winnowing house There are only ruins The nettles grow On each wall and mound The lade (mill race) is dry There is only a trace Of that old stream that used to Turn the millstone

Next to the mill was the *taigh-cathaidh* or winnowing house. These had a window or a door to the east and west and the through draft separated the beaten husks from the grain.

The mill stopped working around 1890. When Captain MacDonald retired around 1935, he built the big house in Milton using much of the stone from the mill and fanning house. One mill stone was left as a bridge over the stream.

The fact that this part of Caolas has an English name is interesting as it is undoubtedly an old mill. It is said to have been given the name by the factor of the time. It is probably the first English place name on the island.

## The Old Cornaig Mill

In 1774 the estate built a new mill at Cornaigmore, just to the west of the house called Torosa, to augment the unsatisfactory working of the Crossapol mill. It was supplied by the waters of *An Lèanag Mhòr* (the big meadow). The first miller was John MacCallum, who was born in Mull in 1743. The rent was set at £4 a year. He was forbidden to "distil any grain into spirits" and the Duke promised to "give him the timbers necessary for couples and rafters out of his woods in Mull or Morven."



Postcard of the Cornaig mill drawn before the miller's new house was built, probably around 1900.

Hector Cameron told this story about the mill:

"The story is still told and its truth vouched for, that during a hard frost when the seventeen tenants of Balevullin came to take their turn of the mill, they found the sluice fast in solid ice. All their efforts to raise it were unavailing, while their families were starving for want of meal. Just as they were giving up hope of accomplishing their task they espied a fellowtownsman in the person of Donald Cameron, a soldier of Fontenoy (1745) fame, in full Highland uniform arriving home on furlough. His help was immediately requisitioned. He placed a foot on each bank, twisted his plaid round the lifting-bar, and with one heave of his manly shoulders dislodged the refractory sluice. In the effort every button of his gaiters broke from their fastenings. But, then, the mill-wheel turned merrily."

## The New Cornaig Mill

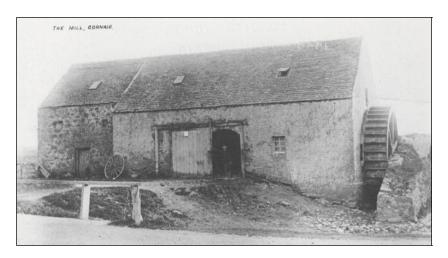
Turnbull had recommended the building of a linen mill for processing flax in 1768, and Cameron wrote that "a portion of the walls of an older flax mill stands about 20 yards to the north of [the new mill] and forms part of the present miller's steading."

Turnbull had also thought that "a water mill at Cornaigmore, where there seems to be better fall, or a greater supply of water, would be sufficient for grinding the whole victuals of the island."

Landlords throughout the country were starting to invest in larger, more efficient mills with vertical water wheels. These generated a greater income, and made the tenants less dependent on outside relief in times of poor harvests.

By 1771 the 5<sup>th</sup> Duke had written to his chamberlain asking for plans to be made for such a mill. It took until 1802 for a contractor, James Morrison, to be appointed. The builder, however, disappeared to the Ross of Mull where he was erecting a church. The chamberlain was furious. "Though the milns are very much needed, the least evil may be to postpone the work till next spring and put the old miln in Cornaigmore in the best order it will admit of to grind the crop." The 'water wall' bearing the water wheel had to be built stronger than the rest as it took more strain.

The mill was finished in 1803. It took over a year to find someone willing to rent the mill, and the Duke again wrote to his chamberlain saying "How happens it that you have not found a proper tenant, and that you say nothing of the rent I may expect for the great sum of money I have laid out?"



The old mill at Cornaig when it was still operating in the 1920s.

The next year Archibald Haggart took over the new mill. The rent for the buildings and the use of the mill croft, which had been cut out of the Cornaig farm, was set at £40 a year. The cost, or *multure*, to the crofters using the mill was set at 1/17<sup>th</sup> of the grain that was sent to it, and the chamberlain went on to recommend "it may be necessary to prevent any grinding going on with the querns by imposing a fine, and destroying an old miln in the farm of Coelis, fitted up many years ago upon the horizontal construction by the tenants, and very hurtful to themselves by the waste of grain."

Haggart did not stay long, and the succeeding millers were:

James Maitland, married in Campbeltown in 1807 but on Tiree by 1808;
Archibald MacMillan 1809-1826;
Archibald Campbell (born Ardchatten, moved to Luing) 1826-1841, was heavily in
arrears by 1833, owing the Duke £84;
his son John Campbell took over on his father's death in 1841, aged 20, and later
moved to Glasgow, then New Zealand;
Alexander MacKinnon 1861-1869 (the estate increased his rent from £19 to £30 in
1861):

Archibald Cameron (the Valuation Roll lists him at the Cornaig mill from 1870-1874,
the Census as 'miller' in 1851, 1861 and 1871, living in Kilmoluaig);
Archibald MacDonald 1875-1880;
"Widow of Archibald MacLean" 1880-1886;
"Widow Marion MacLean" 1886-1887;
Archibald MacLean (Èardsaidh Ruadh, or A' Mhuinear Ruadh) 1887-1920,
grandfather of Donald the butcher. Donald remembers him as "a good businessman -
a good head on him." He also dealt in cattle and "could buy and sell alright". As
Archie grew older he was helped in running the mill by Alec Hector MacPhail,
Clachan, Donald Archie MacLean, and Lachainn Iain MacPhail, the postman, who
was married to Alec Hector's aunt Kate.

Although the water wheel was vertical, gears inside the mill turned the upper horizontal 'runner' stone over the stationary lower or 'nether stone. These were held together by a wooden spindle which was greased with beef suet. The best stone, quarried in pieces and stuck together, came from France, but some of the mill wheels probably came from a sandstone quarry at Inninmore bay, south of the mouth of Loch Aline. The wheels, weighing around 35 cwt., were easier to transport by sea.

The grinding surfaces of the stones were 'dressed' by the miller every year into an elaborate pattern of channels. Grain was fed in the centre of the upper stone, and the miller controlled the distance between the stones, and consequently the fineness of the meal, with a number of small wedges. The miller could also control the speed of the grinding wheel, by opening a metal hatch before the water hit the wheel.



The mill lade at Cornaig.

The new mill was powered by water from Loch Bhasapol. Originally a small stream had emptied the loch from where the windsurfing hut is today. This flow was blocked off and the loch level raised. It could then be controlled by the *col-uisge*, or sluice gate, at the top of the lade. This gate was screwed up and down, depending on the level of the loch, using a large spanner. Even the entry of water into Loch Bhasapol from the Kilmoluaig sliabh was controlled by the miller using a small dam called *Garradh a' Tòrraidh* (wall of the mill dam). At the same time on the rest of the island the estate was draining small lochs and marshes to bring land into cultivation as the population soared.

The water was led down a sluice to the vertical wheel, which was 'breast-driven', hitting the wheel halfway down. This was less efficient that an overshot wheel where the water hit the wheel higher up, but was the best that could be achieved as the loch level is only slightly higher than the mill.

*Iain Chaluim* (John MacKinnon, Kilmoluaig) had the following rhyme about the Cornaig water wheel:

Each mòr dubh 'S falbh leis an t-sruth Chan eil an Alba n' an Eireann Na leumas e air a' mhuin.

Big, black horse Going with the stream There is no-one in Scotland or Ireland That could jump on its back.

The south end of the mill is taken up with the àth, or drying kiln. Grain had to be dried before milling, and great skill was needed in making sure it did not toast too fast or the flour would be left with a bitter taste. Once the fire was going well it was kept going round the clock. One man, Donald MacDougall (Dòmhnall Chaluim Dhùghallaich) from Cornaigbeg, once slipped on the plates and almost fell into the fire below.



The great-grandsons of John MacCallum, the first miller at Cornaig, at their farm on Pictou Island, Nova Scotia in the 1950s.

"The kiln at the mill was fired mostly with drift wood [and coal] which was washed ashore during the winter. The grain was poured onto the iron sheets above the kiln and two men, with white cloths tied over their boots, went into this part of the mill with wooden shovels with which they kept turning the grain at intervals until all the grain was toasted brown. At this stage the grain was then ready for milling. The kiln had no chimney and, when fired with the wood, the hot fumes were very sore on the eyes, especially when you went up the wooden stair to the loft and stood at the entrance doorway above the kiln where the seed was being toasted. This door entrance can still be seen in the centre gable inside the mill."

"I can remember as a boy going into the mill where the kiln was fired and the men were busy toasting the grain, they would give myself and the other boys a handful of grain to eat. I can also remember watching the mill wheel going round and was fascinated by the spray it threw off on a windy day. At school playtime I and the other boys would stand watching it, such was the spectacle. Another recollection is of Hugh MacDonald, a builder from Kenovay, repairing the wooden buckets on the wheel. I don't ever remember being at the actual milling of the grain as, I presume, children would not have been allowed in then. I can also remember the mill bridge and the bridge at the cross-roads, both made of timber with wooden sides. In 1940 they were replaced with concrete and stone built sides as seen today." Archie MacKinnon.

"There was a chute coming from the top...the miller was all white [when he was grinding]. You'd think he had a white apron on." Donald Kennedy, Balinoe.

Donald MacLean, the butcher, remembers his grandfather's mill well. It was very noisy "yes, a clatter, yon stones rubbing together".

Hector Campbell (*Eachann Lachainn*), Cornaigbeg, then a pupil at the Cornaig School, remembered the school building shaking when the mill was working in the 1930s.



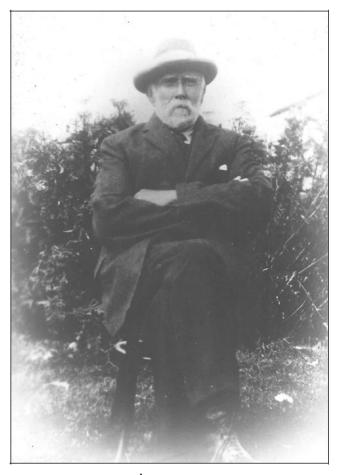
The tethering stone at Cornaig mill.

"Transport on the island was by horse and cart thus the grain and drift wood would be transported to the mill in this manner. To this day there can be seen a large stone with an iron ring fitted into it about fifteen yards from the mill and beside the main road and it was here that the crofters would tether their horses whilst they were using the mill.

"I do not know when the mill stopped operating, but it was certainly working when I left the island in 1943." Archie MacKinnon.

The last to work the mill were the fathers of Willie MacPhail, Clachan, and John Donald MacLean. The last crofter to take corn to the mill was said to be the late Alec MacNeill, Balevullin

"When I left Tiree in 1951 the Mill was intact with a West Highland slated roof. The main door was timber and was on a sliding track. The mid floor was intact in the main building, and at the south end the cast iron loft was also intact with all the pans in place, these being supported by two round columns which carried a cast iron spine beam and it in turn carried the cross beams with the opposite ends fitted into the walls. The cast iron slotted trays sat on top, and these slots allowed the heat to pass through and dry the seed from the kiln. The mill wheel was in place with all the machinery which carried the grinding stones inside.



Archibald MacLean (*Èairdsidh Ruadh*), the last miller at Cornaig.

"In my school days we walked along the loch side every day and crossed over the lade at the sluice gate. The sluice assembly was made up with oak. The design was two pieces of timber with one groove in each length set vertical with a head piece fixed across the top. The overall width of the frames was four feet five inches. The sluice gate worked in a vertical manner and slid in the vertical grooves operated by means of a treated metal rod four feet long with a forked end and that passed down each side of the wooden gate and was bolted through from each side. The treated rod was one and a half inches in diameter and passed through the head piece and had a three inch brass nut that sat on a metal plate. When the nut was turned clockwise this would raise the sluice gate and when turned anti-clockwise would lower the sluice gate, closing off the water and forming a dam. The whole assembly was fitted between stone butts and cement rendered in place." Iain Aonghais MacKinnon.

"We would go down at dinner time [from school to the mill] and we would get the strap if we were late." Donald Kennedy, Balinoe.

"The lade at the loch end was built in stone and lime, was nine feet wide and five feet high and eighty five yards long, but it reduces to four feet wide at the sluice gate. The lade from the sluice gate is three hundred and twenty yards long and is an open drain type six feet wide by four feet deep approximately. The lade from the mill wheel is built of stone and lime and is three feet six inches by two feet deep and is ninety five yards long where it meets up with the open ditch lade. The length of the lade from the loch to the mill wheel is about five hundred yards long approximately. Where the water reaches the mill wheel it can be led into the wheel or it can drop down before the wheel. This is done by means of a steel flap door which was controlled by the miller, as the amount of water coming down the lade controls the speed of the wheel. The lever for this was attached to the steel flap and passed through the wall where the miller would have easy access for working the flap and controlling the water flow. The diameter of the grinding stones was four feet nine inches by ten inches thick with an eleven inches diameter hole in the centre.

"[A] tenancy of the mill was [signed] by Archibald MacLean on the 6<sup>th</sup> of September 1905. The factor at that time was a Hugh MacDiarmid and he lived in Island House. The rent for the mill was £42 per annum. The conditions for the tenancy were that the miller had to make good any breakages to machinery which may occur, and he had to clean out the mill and lade regularly. He was entitled to receive as payment [his multure] one seventeenth part in weight of all the grain sent to the mill and in respect of him providing light, and cleaning the mill and the kiln and the small lade at his own expense, he was entitled to claim one eighth part of a bushel of grain, after having been separated from the husk, from each person using the mill or kiln in lieu of the aforementioned cleaning [he had a measure in the mill for this].

"The miller was not allowed in any way to keep or allow animals of any description into the mill; this was all written in the tenancy contract.

"He was also to manage, cultivate and manure the arable land according to the rules of good husbandry. Further, he was also allowed to gather and use seaweed for manure purposes as the occupant of the holding." Iain Aonghais MacKinnon.

The original miller's house was enlarged around 1920.

#### Scarinish

A new horizontal mill was built by the estate in Scarinish around 1770 to help the struggling Crossapol mill. This was probably at a small bay next to the oil tanks on the way to the pier, although there was said to be another mill between the present day Banker's house and 'The Willows'.

Turnbull in 1768 had recommended "a windmill about the centre of the island would answer best". The Duke was taken with this idea and asked his chamberlain to get estimates in 1771. By 1801 nothing had happened, and the Duke ordered "it best to put it down near the best water-miln in the island, so as one miller may manage both, and make best use of the one or other according to circumstances." Despite this instruction, although the Cornaig mill was about to be built, the windmill was erected behind the schoolhouse in Scarinish, which is known as Bail' a' mhuilinn (town of the mill). There is no record of how successful it was.

## Crossapol

In 1675 the "Miln of Hulliboill, possest of Lauchan MacLean, Ballewilling." This is likely to have been in present day Crossapol, as *Loch an Eilein* was originally known as *Loch Hylipol*.

In 1768 "there was no mill in Tiry but one at Crossapol, and at present not in proper repair... [it] is not supplied with water longer than four or five months of the year".



Baugh millstone.

In the 1779 Census Donald MacCallum, 24, from Mull, and the brother of the miller of the old Cornaig mill, was recorded as the miller. He lived in Balemartine.

### Baile Mhic 'Eotha'

This is now part of Barrapol township, and the mill was just to the east of where John MacFadyen lives today. A story about the mill was recorded around 1880 by the Rev. John Gregorson Campbell, Tiree's minister at the time:

"The wife of Lachlan Cattenach, the then MacLean chief [around 1515], began an affair with an Irish nobleman called Uilleam O'Buaidh, and began corresponding with him. To test the strength of their relationship, Cattenach handed his wife a knife saying it had come from O'Buaidh. She said:

"M' eudail 'chuir thugam an sgian 'S fhada leam a thriall mi thar muir 'S na 'n a mheall mi mo shlàint Mur docha leam i na 'n làmh 'sa bheil."

My darling who sent me the knife I weary at his delay in coming across the sea And may I not enjoy health If I do love it better than the hand that holds it.

"Cattenach was furious and sent for his relation, Lachlan MacLean from Hynish (Lachainn fionn mac Nèill bhàin), telling him if he brought him O'Buaidh's head 'any crime you may commit...will be over-looked by me'. Lachainn Fionn set off with his seven sons for Islay and thence to Ireland.

"They soon met O'Buaidh coming towards them in a coach drawn by two white horses. As the carriage passed the Tiree men, the Irishman leaned out the window and asked him where he was from. When he learned he was from Tiree, he asked Lachainn Fionn to take a message to the Chief's wife. As he handed the letter over, the Tiree man took it with one hand and cut O'Buaidh's head off with the other. Making his escape he returned to Tiree in his galley and went up to Island House. The Chief and his wife were at their breakfast and Lachainn Fionn set O'Buaidh's head on the table, whereupon the Chief's wife died of shock.

"Some time later, five of Lachainn Fionn's sons were taking peats home from Moss to Hynish. Because of a dispute with Big Dewar of Balemartine they were forced to go the back route over the Balephuil sliabh. They were late and their path took them over a bridge at the mill at Baile Mhic 'Eotha'. However the miller had lifted it at sunset as usual and one of the packhorses was drowned. When they told their father, Lachainn Fionn, he was furious and said 'if my horse choked on his account, the same thing will be done to him tonight.' Father and sons went back to Baile Mhic 'Eotha' and dragged the miller from his bed and hanged him on the gallows in the field above Island House. The next morning Cattenach saw the body swaying on Baca na Croiche (the hangman's hill)[outside Island House] and was heartbroken, realising immediately that it was Lachainn Fionn's answer to O'Buaidh's murder."

## Full List of Mill Sites (see the listing of Tiree place names for more detail)

- 1. Milton
- 2. Sruthan Àrais, between Mìodar and Salum on the north coast.
- 3. Loch a' Lathaich, east of Sgiobnais, Ruaig.
- 4. *Cnoc a' Mhuilinn,* (hillock of the mill) on the east of the track leading up to Lodge Farm, Kirkapol.
- 5. Port a' mhuilinn, (harbour of the mill) on the road down to the pier.
- 6. Bail' a' mhuilinn, (township of the mill) behind the schoolhouse, Scarinish.
- 7. Between 'The Willows' and the Banker's House, Scarinish.
- 8. *Port a' mhuilinn MhicArt*, (harbour of MacArthur's mill) on the coast between Scarinish and Heanish.
- 9. Port a' mhuilinn, Baugh.
- 10. Old Cornaig mill, west of the house Torosa.
- 11. New Cornaig Mill.
- 12. Bail' a' mhuilinn, Balevullin.
- 13. Baile Mhic 'Eotha', in front of John MacFadyen's house in Barrapol.
- 14. Port a' mhuilinn, at the start of Happy Valley, Hynish.
- 15. Crossapol, between Loch an Eilein and the sea.