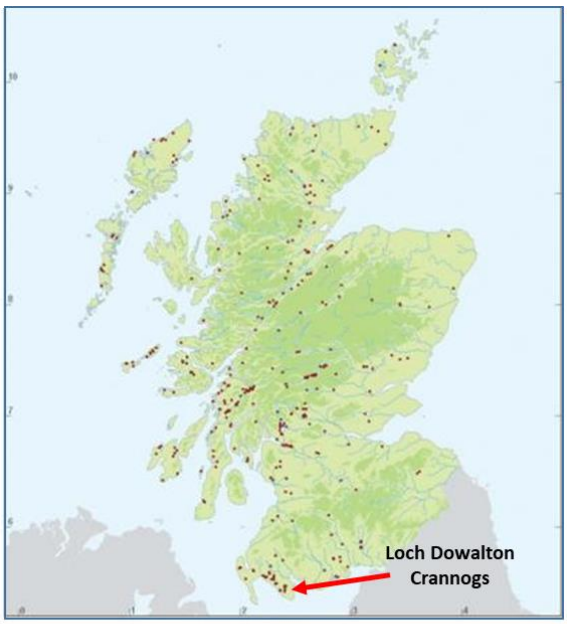
The Crannogs of Loch Dowalton

Main Reference: The Lake Dwellings of Wigtonshire by R.Munro, published 1885.

Introduction

In a concise history of Scotland, it is written that 'by 700 BC, the first evidence of Celtic culture could be found in Scotland, with the land divided up amongst different tribal groups. Forts, duns, brochs and crannogs began to appear.' 21st century research has revealed crannogs being occupied as early as the neolithic age in the Outer Hebrides. These were all fortified dwellings necessary for survival in these relatively primitive and warring times of the neolithic age (10,000 – 3,000 BC), the bronze age (3,000 – 700 BC), the iron age (700 BC – 500 AD) and the middle ages (500 – 1500 AD). In some parts of Scotland crannogs remained in use as late as the 18th century.

A Loch Crannog built on stilts at the Loch Tay Crannog Centre



Distribution of Crannogs in Scotland

A Loch Crannog built on an artificial island similar to those on Loch Dowalton

A crannog is an ancient loch-dwelling built on an artificial island found throughout Scotland. Many crannogs were built out in the water as defensive homesteads and represented symbols of power and wealth for kings, lords, chiefs and prosperous farmers. Crannogs have been variously constructed as free-standing wooden structures, as in the photo, although more commonly they exist as brush, stone or timber mounds that can be revetted with timber piles – more typical of Loch Dowalton (home of the Dowalls), as depicted in the painting. However, in areas such as the Outer Hebrides of Scotland, timber was unavailable from the end of the Neolithic era onwards (about 2,000 BC). As a result, stone crannogs, or duns, supporting drystone architecture are common there. Most crannogs were small, circular islets, usually 10 to 30 metres (30 to 100 ft) in diameter.

The causeway to Eilean Dhomhnaill, "The Isle of Donald", in Loch Olabhat on North Uist, Scotland, what is believed to be the earliest crannog. Pottery found there suggests a Neolithic period date of 3200–2800 BC.

The site of a crannog on Loch Kinord (west of Aberdeen) occupied from the 8th – 13th centuries

Why the connection with the the McDoualls of Freugh?

One of the first entries in our family tree mentions Ravenstone, just to the east of Loch Dowalton:
Gilbert MCDOWALL of Ravenstone, Freugh & Urill, Wigtoun, Scotland, d.ca.1473

A century later, another entry indicates that two generations were associated with Dowalton:
Margaret MCDOWALL Heiress of Freugh m1.1583 John MCDOWALL d. Jan 1588, of Dowalton, her 3rd cousin

(John McDowall's father was William MCDOWALL of Dowalton, Kirkinner)

There is a 1330 record of the McDoualls of Longcastle, of which, at that time, Ravenstone was a part. It is also recorded that at the time of John and Mary McDowall getting married in 1583, they owned the lands of 'Ravenstoun and Longcastle', together with those of Freugh. Ravenstone and Longcastle were located at either end of Loch Dowalton – see the maps that follow.

Historians agree that the naming of the loch is no coincidence, and that it was likely inhabited by the McDowalls or Dowalls (pronounced Douall/Dool in the Gaelic tongue) living on the crannogs going back generations. The loch exists no more because it was drained in 1863 by the landowner, Sir William Maxwell of Monreith, Lord Stair, thereby creating up to 500 acres of good farmland from what was before a rather shallow, marshy loch. The adjacent landowners, Robert Vans Agnew, Esq., M.P., of Barnbarroch, and William Maxwell, also benefitted because of the draining of the extensive marshes surrounding the loch.

Beside the material value of the land reclaimed, the benefits arising from the improved climate were striking. 'In still damp weather, raw heavy fogs hung over the swampy bogs at the head of the loch before it was drained. Now that the stagnant marshes are dry, the surrounding air is purer and warmer, and consequently more healthy.'

Once drained, the loch revealed some very interesting archaelogical finds, including the Crannogs, built as protection against marauders and robbers. Each island would have had a chief's roundhouse built on it, and possibly additional structures, with a single point of access either from the shore or by boat. The Dowalton Crannogs were amongst the first to be found, and generated so much interest at the time, that experts studied them in considerable detail and published reports that exist today.

Location

Loch Dowalton was located in the area of Wigtounshire called the Machers or moors. Historical maps show the location of Loch Dowalton and an ancient fortification, known as Longcastle.

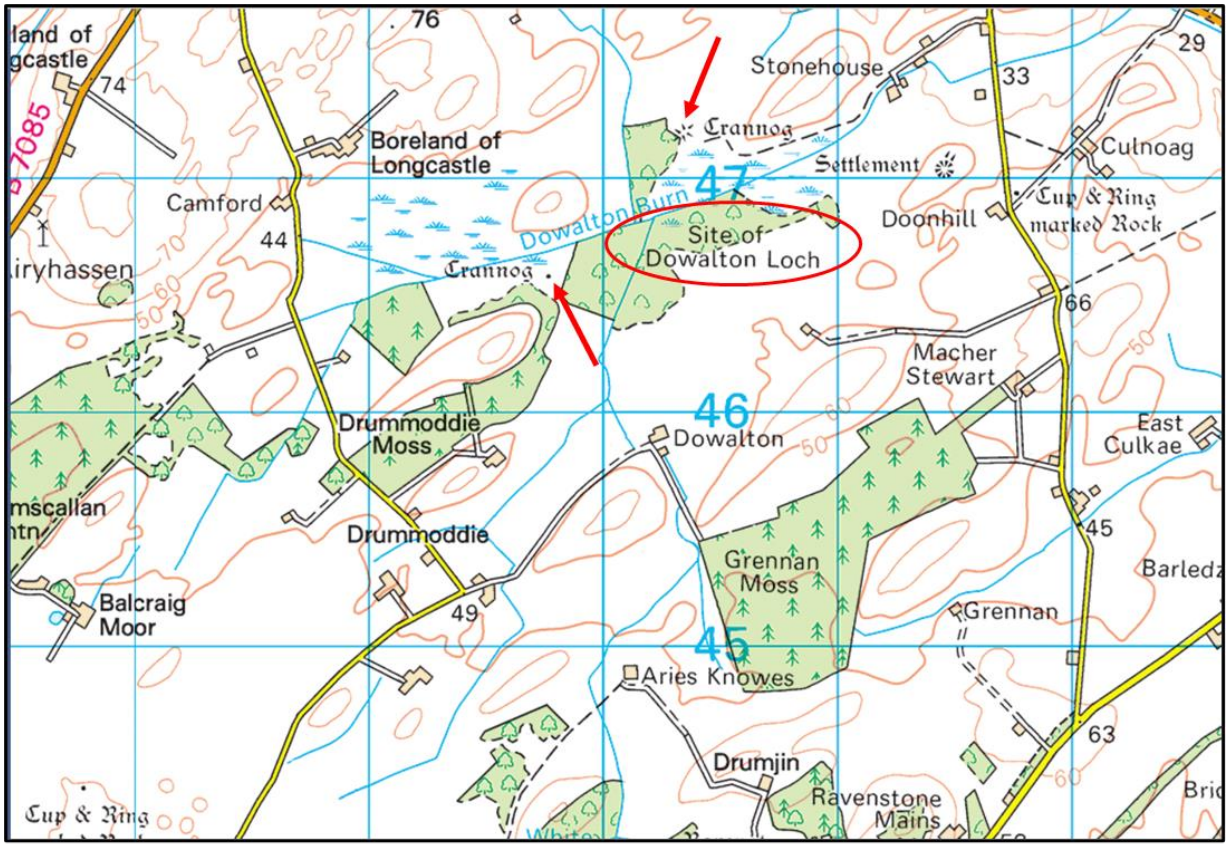
The newer OS (ordnance survey) map shows the location of two of the crannogs, one of which was on what would have been the north shore of the loch, and a smaller one in the south.

The loch is described as measuring 1½ miles (2.4 km) in its greatest length, and about half that in breadth.

An 18th century map of Galloway showing the relative locations of Clan McDouall

Map of Longcastle or Dowalton Loch in 1782 (before draining)

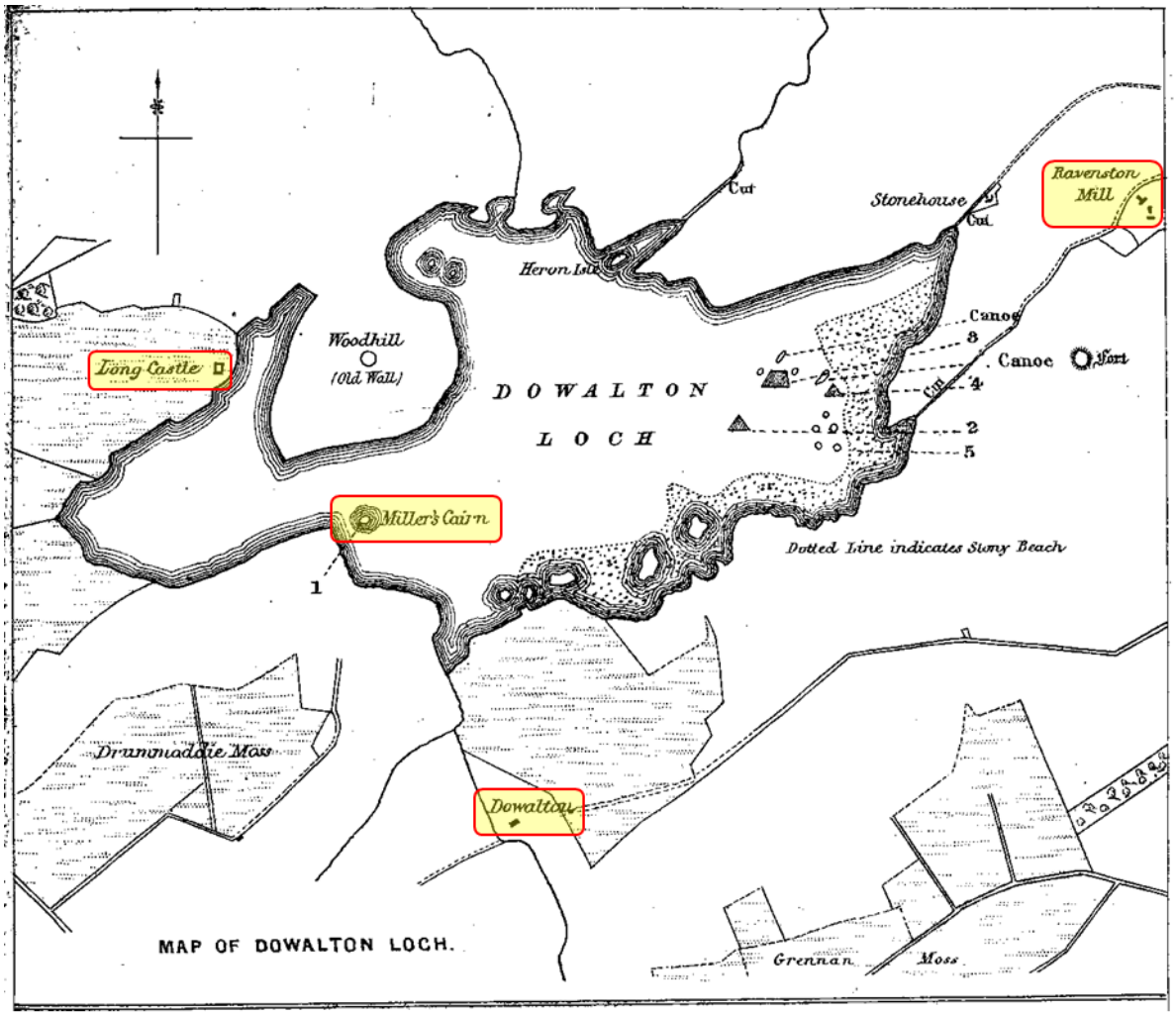
Dowalton map from 1896 (after draining of the loch)



Dowalton 2015 OS map showing two of the Crannog sites, now a nature reserve.

The Miller's Cairn

The Crannog on the western shore, with lines of piles apparently to support a causeway to the beach, was later used as a Miller's Cairn, i.e. a mark to indicate the depth of water in the loch when it was a source for the neighbouring mills. Prior to draining, there were 3 water outlets; one led to the Mill of Airies, a second was close to the Stonehouse farm, and the third fed the mill dam of the Ravenstone Mill. One of the original cuts made to direct the water is considered quite ancient, indicating the establishment of a mill, and hence a local community, as early as Roman times.



1868 map of Loch Dowalton showing the Crannog sites and the Miller's Cairn

Generally speaking, it was the Romans who introduced water-powered corn mills to western Europe. When the water level exceeded a certain point on the miller's cairn, the bordering meadow-lands became flooded, and their tenants claimed the right to open the mill sluices and allow the water to run off.

In former times, when a corn mill was erected on an estate, the tenants were obliged to send their grain exclusively to the owner. This practice led to the erection of mills all over the country wherever suitable streams could be found. "Thirlage" was the feudal law by which the laird could force all those vassals living on his lands to bring their grain to his mill to be ground. The law ensured that all the grain the vassals produced could be measured and thus taxed. Vassals had to carry out repairs on the mill, maintaining the lade and weir, as well as conveying new millstones to the site. Such trees as beech and particularly hornbeam were grown as a crop to provide the necessary wood for the mill machinery. The Thirlage Act of Scotland was repealed in 1779 and these local mills gradually fell into disuse, and of their former existence, little evidence now remains except artificial dams and water-lades. This is the case with Ravenstone Mill at the east end of the loch.

Bruce McDowall, a family historian (see also the appendix), notes:

'Mention of a Ravenstone mill goes back as early as the 1692 Hearth Tax. With three millers and a kilnman, the Ravenstone Mill must have been a busy operation indeed. My gg.grandfather, James McDowall, was the miller at Ravenstone from about 1820 and my g.grandfather was born there in 1822. This mill was still operated by our family in 1851, but by the 1861 census it had ceased operation. Once the water level dropped much below the original level, water supply to the mill wheel would have been no longer available. The miller's house was occupied in 1861, but not by millers. The house is still in use, but now goes by the name Culnoag Cottage. It was extended and refurbished in 2006. The lade from the mill dam is clearly visible, and the location of the wheel pit adjacent to one end of a ruined building, leaves little doubt as to which one was the mill.'

Loch Dowalton Excavation

The lip of rock at the eastern point of the loch was the main barrier between its waters and the lower ground in that direction. In 1862 – 1863 a cutting was made at its south-eastern extremity of no less than 25 feet deep for a considerable distance through the wall of whinstone and slate that closes the valley. During the summer of 1863 the waters subsided and the artificial islands became visible.

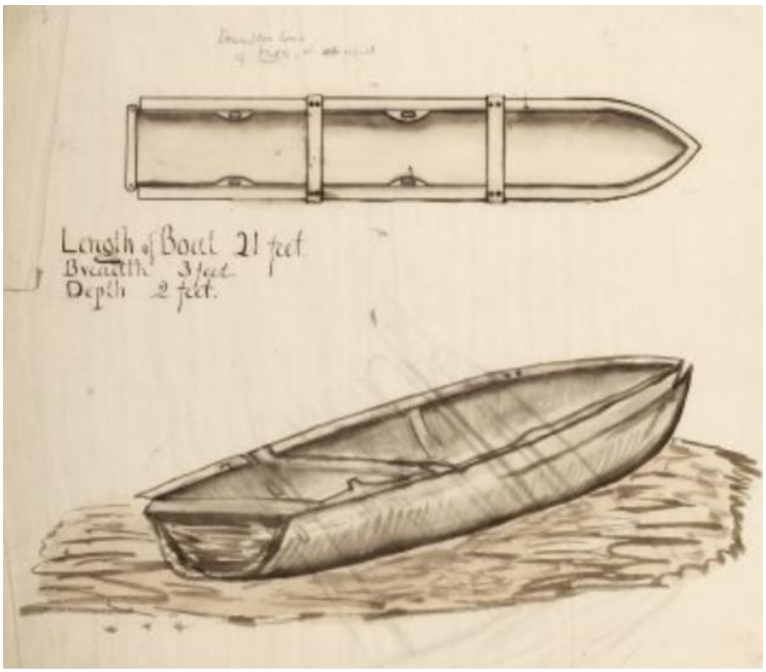
Medieval Bronze Pot found on the shore of Loch Dowalton full of tow (wax); 8" diameter, 12" high.

Celtic bronze brooch in the form of a triskele found on a Loch Dowalton Crannog. The spaces were likely filled with coloured enamel. 2" in diameter.

'Many objects were picked up without excavation, lying on the surface. I remember picking up a piece of white armlet. I was told at the time that a legend had always existed that a village lay beneath the waters of Dowalton Loch.'

Three of the Crannogs were described in the report when they were first excavated in August 1863.

'On reaching the island, over about 40 yards of mud, I found it nearly circular, about 38 yards in circumference and 13 yards in diameter. It was elevated about 5 ½ feet above the mud, and on each side of it were two patches of stone, nearly touching it. On the north side of it lay a canoe of oak, between the two patches, and surrounded by piles, the heads just appearing above the surface of the mud; it was 24 feet long, 4 feet 2 inches broad in the middle, and 7 inches deep, the thickness of the bottom being 2 inches. On removing the stones which covered the surface, several teeth, apparently of swine and oxen, were found ; and I proceeded to cut a trench round the islet; and upon coming to the southern end a small quantity of ashes was turned up, in which were teeth and burnt bones, a piece of a fine earthenware armlet of a yellow colour, and a large broken earthenware bead, striped blue and white, together with a small metal ornament, apparently gilt; two other pieces of an armlet of the same material, one striped with blue and white, were also found on the surface. On cutting deeper into the structure (the foregoing objects having been found on the outside, about 2 feet from the top), it proved to be wholly artificial, resting on the soft bottom of the loch; the uppermost layer was a mass of brushwood about 2 feet thick, beneath it large branches and stems of small trees, mostly hazel and birch, mingled with large stones, evidently added to compress the mass; below that were layers of heather and brushwood, intermingled with stones and soil, the whole resting upon a bed of fern about 1 foot thick, which appeared in all the structures examined to form the foundation. The whole mass was pinned together by piles and



A sketch of the boat or canoe found in Loch Dowalton

stakes of oak and willow, some of them driven 2½ feet into the bottom of the loch, similar to those above-mentioned. The islet was surrounded by an immense number of these, extending to a distance of 20 yards around it; and the masses of stone, which apparently were meant to act as breakwaters, were laid amongst them.'

'The one next examined stood about 60 yards off, at the extremity of a rocky projection into the loch, but separated from it by the now hardened mud. It was smaller, and the layers were not so distinctly marked, and some of the timbers inserted in it under the first layer of brushwood were larger, and either split or cut to a face. A stake with two holes bored in it about the size of a finger, a thin piece of wood in which mortises had been cut, and a sort of box, the interior of which was about 6 inches cube, with a ledge to receive the cover, very rudely cut out of a block of wood, were found.'

'I succeeded two days afterwards in reaching the largest islet in a boat. It appeared by measurement to be 3 feet below the level of the other islets; but it was much larger, and several depressions on its surface showed that it had sunk. Wherever the soil was not covered with stones and silt, teeth were scattered all over it. We found quantities of bones at different depths in the mass, but always below the upper layer of faggots, and towards the outside. The progress of the excavation was very soon stopped by the oozing in of the water; but a workman, plunging his arm up to the shoulder into the soft material, brought up handfuls of the fern layer, mingled with sticks and hazel-nuts, and large bones believed to be those of oxen.

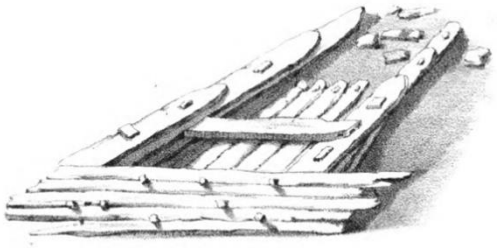


Fig. 2

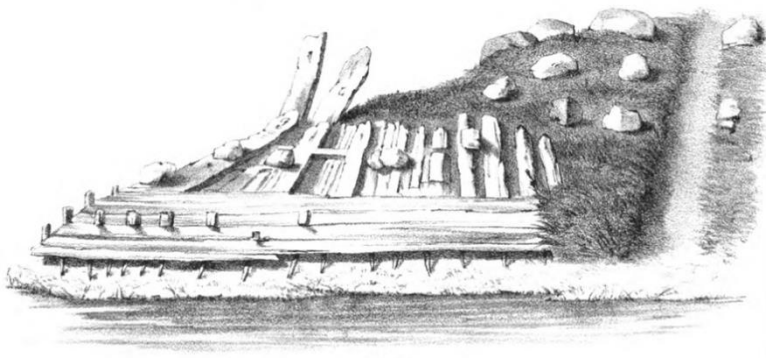


Fig. 3

Construction of the Crannogs in Loch Dowalton

Near the spot, lumps of sand and stone, fused together, were picked up. On the south side of the island extraordinary pains had been taken to secure the structure; heavy slabs of oak 5 feet long, 2 feet wide, and 2 inches thick, were laid one upon another in a sloping direction, bolted together by stakes inserted in mortises 8 inches by 10 inches in size, and connected by squared pieces of timber 3 feet 8 inches in length. It extended to the length of 23 yards, and its base, about 5 yards beyond the surface of the mud, was formed of stems of trees laid horizontally and secured by stakes. In other respects, the formation resembled that of the other islet, but it was far larger, measuring 100 yards round by about 36 yards across. No building of any sort was discovered; but a large plank of oak, 12 feet long, 14 inches broad, and 7 inches thick, lay covered with stones on the north side. The sinking of the mud had by this time laid bare a second canoe between the islet first examined and the shore; it was 18½ feet long, 2 feet 7 inches wide, and barely 2 inches deep ; a block of wood, cut to fit

a hole left probably by a rotten branch, was inserted in the side, 2 feet long, 7 inches wide, and 5 ½ inches thick, and had there been secured by pegs driven through the side; across the stern was cut a deep groove to admit a backboard; a hole, 2 inches in diameter, was bored at about one-third of the length of both canoes in the bottom. This was so rotten that it would not bear my weight without breaking.'

'The next day, being unable to reach the last-mentioned island, I found upon the spot which had been indicated to me on my first inquiry, no less than six structures similar to those before described, in a semicircle. They were, however, much smaller, apparently single dwellings. Though upon some of them charred wood was found, nothing else was discovered, except a mortised piece of timber which might have drifted there; and in one, inserted under the upper layer of brushwood, a large oak timber, measuring 8 feet long by 3 feet in circumference.'

'Throughout these investigations, no tool or weapon of any sort has come to light. In the layers, the leaves and nuts were perfectly fresh and distinct, and the bark was as plainly distinguishable on the stems and timber as on the day they were laid down, as were also the heather and the fern. It is difficult to conjecture the state of the loch when these edifices were formed, and whether or not they were completed at one period. The finding of the large stones in the lower layer of ferns might lead to the belief that they were gradually raised as the waters of the loch increased; and the necessity of strengthening them by breakwaters would seem to prove that the loch must have risen considerably before they were abandoned. No other sort of building has been discovered on them; but the great number of teeth scattered over the surface of the larger island, and even on the mud surrounding, and the immense expenditure of labour indicated in the shaping and hewing of the large timber with tools, which must have been, from the work produced, of the rudest description, betoken apparently a considerable population. The loch must have remained for a considerable period at each of the different levels before mentioned; at one time 6 or 7 feet above its last level (that is, before its drainage was effected), to which it was reduced by three cuts made to feed neighbouring mills, one certainly of great antiquity. At 3 ½ feet below the ordinary level there are unmistakable appearances of a former beach, with which the top of the first-mentioned islet almost exactly coincides. It is remarkable that though there are many rocky eminences in the bed of the loch, none bear token of ever having been used for the erection of these dwellings, which seem invariably to have been based upon the soft bottom of the loch, where the intervening mud and water may have afforded the inhabitants a greater security from attacks from the shore. I had not time to examine fully the shores of the loch; but I was assured by Mr. Chalmers that he had examined them carefully without finding traces of other structures. On a hill to the south there are remains of a Danish fort (i.e. a circular entrenchment), and the very ancient ruin called Longcastle is on an adjacent promontory on the north side.'

'Dowalton Loch lies one mile to the left of the high road, half-way between Wigton and Port William. The name of the loch is probably derived from the Macdowals, formerly lairds of this part of the country. Sir William Maxwell suggests, as an easy explanation of the different levels found in the loch, that the waters originally discharged themselves into the sea from the western end of the valley, a portion of them only now finding an exit that way, in consequence of the formation of the moss or peat towards the centre of the valley, which compelled the remainder to flow into the loch. In this case the structures must be supposed to have been formed in the early stages of the growth of the moss, whilst the loch was so shallow as to make it easy to raise the moss above its waters, and yet deep enough to float canoes and afford the desired security from an enemy.'

Indeed, as far as we can tell, the few industrial remains that turned up greatly strengthened the opinion that the lake-dwellers of Dowalton had come into contact with Roman civilisation. It is believed that until the Romans retreated south of Hadrian's Wall in 128 AD, that they had established a camp close to Loch Dowalton at the south-west end, which has largely disappeared, on a place called Annat Hill (marked as a rectangular encampment on a survey map from 1777, and as a fort on the 1896 map above). However, Annat or Annoid/Annud means church, and a church may well have been built upon a former Roman encampment in the middle ages. Its traces are only apparent where a fence crosses the old enclosure. There is however a confirmed Roman fort or habitation, the only one in Wigtonshire, at

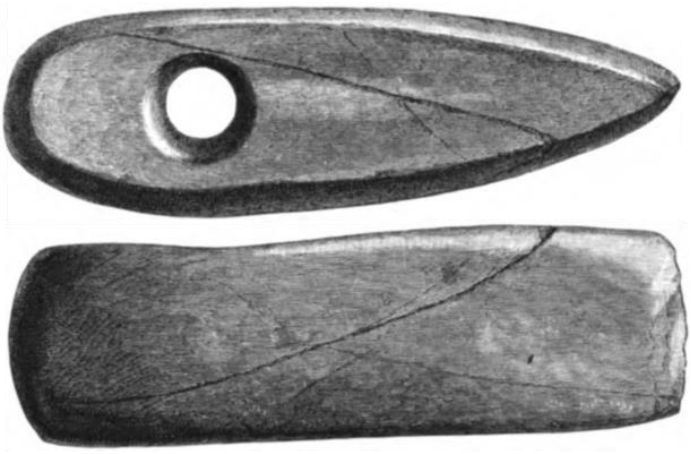
Rispain, 2 km west of Whithorn, and just 10 km from Dowalton. It is believed that Ptolemy referred to it in his writings as ‘Leucopibia’.

A Roman bronze basin found on a Crannog in Loch Dowalton; 10” diameter, 4” high.

A Roman iron hammer from Loch Dowalton

A particularly fine polished flintstone axe head found at Loch Dowalton, indicates habitation from the Neolithic period, specifically between 4000 – 2500 BC. The polished finish and the drilled hole is a hallmark of the late Neolithic; earlier Mesolithic axes were typically "chipped" or "rough," while later Bronze Age versions shifted towards metal (copper or bronze)”.

Most stone axes found in Galloway are polished or ground stone heads, used for clearing woodland during the transition to agriculture.



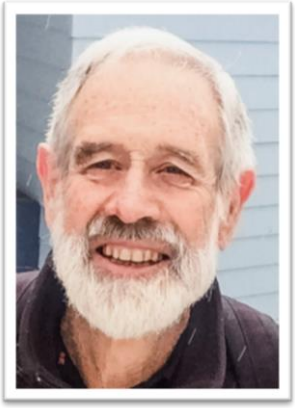
Stone axe head found at Loch Dowalton (Top view above, side view below)

Conclusions

The Loch Dowalton crannogs reveal practically continuous habitation from pre-Roman times, right up to the end of the medieval period around the 15th century. Not only do the different artefacts provide evidence of such long occupation, but the increasing water level of the loch due to the moss and accumulation of peat at the west end, would have occurred over many centuries. Our McDouall of Freugh ancestors, the Dowalls, were in all likelihood the ‘lairds’ of this land, and would have lived on the crannogs for safety, before moving to land-based dwellings like Longcastle and Ravenstone, and later to Freugh.

Appendix follows: Bruce McDowall and The Ravenstone Mill
[This article was first published in Clan Bulletin #35]

Appendix: Bruce McDowall and The Ravenstone Mill



Bruce McDowall

Bruce McDowall, who lives in Melbourne, Australia, is descended from a family who were millers at the Ravenstone Mill near Loch Dowalton, at one time owned by the McDouall clan. Mention of a Ravenstone mill goes back as early as the 1692 Hearth Tax. With three millers and a kilnman, the Ravenstone Mill must have been a busy operation indeed.

Bruce's ggg.grandfather, who was born about 1755, appears to have been a dissenter from the mainstream Church, and therefore lacks OPR (old parish registry) entries, other than his 1792 marriage. The main reason he can be assigned is his MI (monument inscription) in the old kirkyard at the Clachan of Penninghame. His gg.grandfather had this headstone erected.

He was James McDowall, the miller at Ravenstone from about 1820 until his death in 1841, and his g.grandfather was born there in 1822. The mill was still operated by them in 1851, but by the 1861 census it had ceased operation. The Earl of Stair, owner of the mill, decided to cease maintenance of it and not renew the tenancy agreement because the plan was to drain it about 1863. Therefore, with the loss of a reliable water supply to the mill, he dropped his earlier plans, drawn up about 1850, to rebuild the mill. His neighbours, W. Maxwell and R. Vans Agnew, had discussed the loch draining project with him beforehand.

The miller's house was occupied in 1861, but not by millers. The house is still in use, but now goes by the name Culnoag Cottage. It was extended and refurbished in 2006. The lade from the mill dam is clearly visible, and the location of the wheel pit adjacent to one end of a ruined building, leaves little doubt as to the mill location (remnants of another building were also present).

Ravenstone Miller's House 2006

Bruce's g.grandfather moved onto the Milldriggan Mill, near Kirkinner, and his brother James a little further north to the Torhouse Mill, west of Wigtown. Another brother, John, had settled in the USA and for a time owned a mill there. James joined his brother in Kansas in 1882 and managed another mill there until his death in 1903. William McDOWALL ca.1755-1802, was likely also a miller. Country millers were also farmers, milling being a seasonal activity. Their tenancy contracts included mill and farm land, reflecting this.

He was a tenant in Barness, parish of Kirkinner. As well as the farm buildings and cottage, Barness also had a mill. Nothing remained of the mill in 2006, but the mill dam and lade were easily identified. The farm owner was able to point out the location where the mill had stood, though having been built over. The cottage was still there, but used as a storage shed. It had even been recently whitewashed.

Oral family history indicates that Bruce may be from a junior branch of the Logan line, but he states that there is no evidence to support that. There is a presumption that the Logan, Garthland and Freugh lines all originally derived from the same stock, although short of some ambitious DNA testing, that may never be proven.

The monument inscription in the old kirkyard at the Clachan of Penninghame.
James McDOUALL to the memory of his father William McDOUALL late tenant in Barness who died 28th June 1802 aged 45 years. Also Adam his son who died the 24th April 1828 aged 4 years and 6 months, and the said James McDOWALL, Miller, Ravenston who died 5th Jun 1841 aged 46 years.