

Inland Waterways News

Glaciers and Guinness

Michael Savage

Most people have heard about the world famous Lough Neagh Eels and the associated fishing industry. However the largest commercial enterprise nowadays on Lough Neagh is the sand extraction business, with thousands of tons of sand dredged from the bottom of the Lough every day.

Lough Neagh sand has always been in demand. History books make reference to early settlers in the 17th century using sand from the Lough Shore in early housebuilding.

The modern dredging operations have produced a multimillion pound value-added industry around the shores of Lough Neagh, with incalculable benefits to the local community and economy in terms of jobs and in much needed exports from Northern Ireland to the Republic and Mainland UK. Products produced range from roof tiles to massive concrete bridge sections. It will be a sad day for the people of Lough Neagh if the sand runs out. Hopefully this will not happen for many years to come.



Michael Savage and 44M, which he has bought and brought ashore on L. Neagh



Clonsilla waiting to unload and Killiney behind being fitted out for sand dredging

Glaciers

During the Pleistocene epoch (beginning two million years ago and ending 10–15,000 years ago) ice sheets covered much of Europe, including Ireland, for thousands of years at a time. These glaciers were many hundreds of meters thick. They eroded the landscape and carried much of the rock debris along with them. These materials can act like sandpaper to smooth the faces of rocks and round out hills. One only has to look at the mountains of Ireland to see the smooth roundness left by the paths of the glaciers.

As the temperature increased, the rock debris picked up by ice sheets was eventually deposited directly as till. Outwash plains of stratified sand and gravel were built by melt waters emerging from the edges of the ice sheet. These melt waters carried the sand and gravel for many miles and eventually built up the great sand deposits of the Lough Neagh basin. It has been suggested that the sands of Lough Neagh could have originated in Scotland or even further afield.

Without the glaciers the sand extraction business on Lough Neagh would never have existed. The sand deposits used today in and around the Lough Neagh basin were probably laid down by the last ice age of the Pleistocene epoch, the late Midlandian, between 23,000 and 13,000 years ago.

Narrow winding ridges of stratified drift known as eskers are built by glacial streams moving in tunnels beneath the ice. Sometimes these tunnels block and when the ice eventually melts it leaves the drift behind. It has been suggested that Rams Island and Coney Island on Lough Neagh could have been formed as eskers. It's a pity the glaciers didn't leave a few more islands on Lough Neagh.



Instant Beach

Guinness

One of the first problems the Lough Neagh sand extraction pioneers faced was to find suitable vessels for the task and, with the expense of new barges prohibitive, eyes turned to the Liffey and the Guinness fleet. Some of these Guinness barges, the **Vartry** (built in Dublin in 1902 by Ross and Walpole at a cost of £2780, measuring 79'5" by 15'6", weighing 75 tons gross) and the **Slaney** (built in Dublin in 1892 by Ross and Walpole at a cost of £2620, weighing 57 tons gross) had already made their way to Lough Neagh for use in the diatomite (clay) trade.

The Guinness barges were used to deliver barrels of Guinness from the brewery at St James's Gate to the ships down the Liffey at Dublin docks, sometimes making two trips a day. The barges used on the Grand Canal (M-Boats) are sometimes referred to as Guinness barges but they belonged to the Grand Canal Company and were used for delivering Guinness to the home market via the Grand Canal as well as other general cargo. At least two M Boats (**44M** and one other) made their way to Lough Neagh after the cessation of trade on the Grand for the sand trade. They were used with their Bolinder engines removed as dumb barges towed by a Bantam tug. The barges owned by Guinness were never used on the canals as they were too big for the locks on the Royal and the Grand.

Leaving Dublin

During the fifties, Guinness started making more use of road transport to deliver the Guinness, and work began to slacken off for their barges. Guinness sold off a lot of their fleet and by the late fifties only two remained in use (the **Castleknock** and the **Killiney**). This coincided with the increased demand for sand from Lough Neagh so a large proportion of the Guinness fleet made its way via the Irish Sea and the Lower Bann to Lough Neagh for a new life. In 1961 the last two also made their way to Lough Neagh to join their sister ships in the Scotts fleet. During the sixties Toome Canal was lined with Guinness barges as Scotts then had their sand quay at the Quay Wall in Toomebridge. The lockkeeper at Toome was kept very busy and sometimes had an assistant.

The early days for the crews of the Lough Neagh sand barges were hard going. There was none of the sophisticated navigation equipment fitted nowadays such as radar, sounders or GPS. The best they had was a compass, a watch and their own skills. Fog on Lough Neagh can be quite dense and the skippers had to rely on the time it took to travel from the pumping ground and a compass bearing to their quay. A note of the various times and bearings was usually kept in the wheelhouse.

Although a large proportion of the Guinness fleet made its way to Lough Neagh, it should be noted that No 23 was sent to Scapa Flow under her own power. No 26 the **Fairyhouse** made her way via the Caledonian Canal to the Humber in 1938 and was called into service for the evacuation of the British Expeditionary Force from the beaches of Dunkirk. During the First World War numbers 12 and 14, the **Liffey** and the **Boyne**, were commandeered by the British Government. The **Boyne** saw service on the French canals. Both were returned to the Liffey after the war.

Where are they now?

The **Vartry** lies half sunk west of the breakwater at the entrance to the floodgates at Toomebridge. The **Slaney** lies in the Queens Gap on the Lower Bann north of Toome Canal. The **Boyne** forms part of the harbour wall at P J Wall's quay in Toome Bay. The **Chapelizod** and the **Castleknock** were lost by explosion during the last troubles, although parts of them can be seen at Scotts Hutchinson's site. The **Clonsilla** foundered in a storm in Toome Bay (the skipper was rescued by a Lough Neagh fishing boat) and lies in seventy feet of water off Doss. The **Foyle** is half buried in the sand at the mouth of the Crumlin River in Lennymore Bay. The **Lagan** forms part of the Quay at Scotts Sandy Bay site. The **Killiney** is lying off Ballyginnif as part of the breakwater.



I have no doubt there are more Guinness barges sunk around Lough Neagh and other waterways and would be interested to hear from anyone with information about them. As a point of interest there are three Guinness **Farmleigh** class barges (including the last one afloat) lying at Waterford in the Kilkenny Blackwater [see page 29]. Anyone wishing to make a pilgrimage to Lough Neagh to see the **Killiney**, the **Vartry**, the hero of World War One the **Boyne** or any of the working barges should contact Michael Savage michael@loughneagh.org or Niall Galway ngalway@vodafone.ie.

Other boats

It has to be said that barges were brought to Lough Neagh from all parts of Europe. A notable addition to the fleet were the John Kelly dumb barges used on the Lagan for hauling imported coal from the John Kelly coal boats: a similar operation to the Guinness barges in reverse. There were at least six of these dumb barges used in the sand trade. Some were used with tugs and others were redesigned and fitted with diesel engines. Quite a few barges were manufactured locally in Portadown Foundry and one, the **Kathleen**, which was last used as a pump boat in Toome Bay, can be seen at Milltown at the Head of Benburb Gorge on the Ulster Canal.

Sand extraction from Lough Neagh really took off during the building boom following the end of World War Two during the fifties and sixties. Notable pioneers were the Scott Brothers, Irwins of Portadown and Norman Emerson.

The Norman

The Emersons sand-barge dredger the 500-tonne **The Norman** caused quite a stir even before it was launched in Lough Neagh in 1998. Images of the impressive barge were splashed all over the local papers with stories outlining its lengthy journey to Lough Neagh. George Emerson purchased the barge from Jan Meinen, who lived on the boat and worked it with his wife Jansje, hauling bulk materials along the canals in Holland. George said

Jan's father was actually involved in building the boat in 1939. He operated the boat for some years and then his son Jan took over some thirty years ago. When I first saw the Verandering, as it was then known, I didn't have much difficulty deciding it was for us. It was in outstanding condition and a credit to the Meinen's, who had maintained it so carefully for many years. I realised we would have a mammoth task, I was told an impossible task, but I made my mind up to buy it and paid a deposit before I left Holland.

Transportation of the barge to the Province and to Lough Neagh itself required some considerable thought. At 170ft long it exceeded the limit to enter the Lough via the River Bann by more than 50ft!



The Norman

The journey started from the Hook of Holland, across the North Sea and up the east coast of Britain. The barge then entered the Caledonian Canal, rounded the Mull of Kintyre and crossed the Irish Sea, berthing in Belfast. The barge remained at dockside for two months while negotiations took place with the local authorities on the best way to transfer to Lough Neagh.

The big problem was getting the barge under motorway bridges so the solution was to sail into Derry and then travel by road to Toome. "By taking this route we had no bridges to go under and just one to go over," explained George. The 150-tonne lift from the water was conducted by Glover Crane Hire, after which there was a further week's work before the road journey. This commenced at 5.30am on a Sunday morning with the convoy arriving in Toome at around 8.00pm that evening, The barge was launched in the Lough the following evening after an all-day effort, and piloted to Emersons home quay at Ardmore after dusk by Kenneth Emerson.

The next stage was to make the barge suitable for sand dredging. Kenneth Emerson was responsible for designing and fabricating the new hold and installation of pumping equipment. With the alterations carried out **The Norman** has been proving itself daily.

Scotts of Toomebridge

Toomebridge was where the famous Scott brothers Oswald, Rennie and Walter had their office and ran the business. The rumour is that Walter was a cautious man and built his office so that it could easily be converted into a bungalow and sold if the business did not prosper. However, history has shown that he had no reason to worry.

By 1965, Scotts employee numbers had increased to about 100 with the opening of the roof tile plant. This was also the year in which the sand quay at Sandy Bay was developed and this was followed with the opening up of the quay at Ballyginnif in 1969. In 1971, the site at Hutchinson's Quay was purchased by the brothers. They also had operational sand sites at Tobermore, Limavady, Traad and elsewhere around this time.

Readers may be interested in the fact that Walter Scott was in the Royal Air Force during the Second World War and was awarded the Distinguished Flying Cross for his exploits as a squadron leader with bomber command. It is therefore no coincidence that there are many linkages between Scotts and aircraft but, as they say, that will keep for another day.



Walter Scott

Today's Lough Neagh barge fleet

At present there are sixteen barges working on Lough Neagh with carrying capacity ranging from two hundred to five hundred tonnes. All are loaded by pump, which brings a slurry of sand and water aboard into a settlement tank, with the excess water running overboard back into the Lough.

There are three methods used for discharging the load ashore: grab crane (the simplest), discharge by hopper into the harbour and pumped ashore or adding water to the settlement

tank and pumping ashore as slurry (the most common method). A method no longer used was to have a pump boat anchored offshore and pump the sand ashore by pipeline. Another method no longer used was to have a barge with a grab anchored offshore to load other barges which came alongside.

The majority of the barges working on Lough Neagh today are Dutch barges bought secondhand on the Continent. Some have been sailed across the North Sea and the Irish Sea and up the Lower Bann while some — at 200 feet long with a beam of 30 feet, too big for the Lower Bann — have been brought in by road. One, the **Tramp**, was delivered in two halves and welded back together at Antrim. The latest arrival **Nijverheid** (renamed the **Bay Shore**) was delivered by road and launched at Toome Bay in October 2003.



The Bay Shore arrives by road

Today's fleet consists of **The Norman** (Emersons), the **Bay Shore** (Emersons), the **Tramp** (Lagans), the **Fairhead** (Lagans), the **Libertas** (Mulhollands), the **Lennie** (Mulhollands), the **Delcapo** (Walls), the **Sandpiper** (RMC), the **Tredagh** (RMC), the **Gylfe** (RMC) plus the six barges belonging to Scotts of Toomebridge listed below.

Scotts have the largest and only purpose-built fleet of six barges, all identical at 120' 6" long by 19' 3" beam and all loaded and discharged by pump. They were built Bannamax (the largest size for the locks on the Lower Bann) by James W Cook Ltd of Wivenhoe, Essex. These are the **William James** (the earliest: built 1968), **Ram's Island**, **Coney Island** (the latest: 1974), **Sandy Bay**, **Ballyronan** and **Toomebridge**. Two other barges of this class, the **Lough Neagh** and the **Ballyginnif**, were lost by explosion during the troubles. Sadly three lives were lost during this incident.

Over seven thousand tons of Lough Neagh Sand was delivered to Croke Park as a base for the playing surface. It's little wonder that the Sam Maguire has been won by teams from the shores of Lough Neagh over the last two years!

With thanks to those in the sand firms who allowed the use of their photographs.