LEARG NA HENSION BRIDGE AT CARSE

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Contents

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Editorial

In this issue we delve back into a time before the first records of human occupation in Argyll: 16,000 years ago to be precise. We are given a fascinating picture of how sea levels have changed from then until the present day. We also look at the new light that is being shed on an important transitional period when Mesolithic culture was changing into the Neolithic. Moving into historical times, we look at the various bridges which have been built over the waters of Leargnahension.

We also include a fascinating article about the tropical affinities of our special range of oceanic bryophytes (mosses and liverworts). Our Atlantic woods are sometimes described as remnants of temperate rainforests and we hear how this indeed seems to be the case.

Thanks to Jonathon Arnot for computing help and to Rebecca Pine for providing this issue's front cover.

50th anniversary

NHASMA celebrates its 50th birthday in March of next year. It is intended to make the issue of Kist for that season – the spring issue 2005, no. 69 – a special anniversary one. If anyone has recollections of the past fifty years of the society which they think might form the basis of an article please get in touch with me. If there is anyone who remembers the early years I would be especially interested.

THE STORY OF THE BRIDGES ON THE WATERS OF LEARGNAHENSION 1765 – 2004

Fiona Campbell Byatt

Abhuinn nam hension, the 'River of the Ash Tree' or the Water of Leargnahension, is a river that runs through Loch à Bhaillidh between the hills down into Loch Stornaway. For most of the year

the river runs fairly slowly, but when it is in spate people living in this area must have found it a barrier to attending the fairs held from earliest times in Tarbert. Up to the 15th century the main mode of transport, except when droving cattle, would have been by boat. The indented coastline of Knapdale ensured the possibility of a safe anchorage in a storm and, owing to the type of small vessel used, boats could be beached on most stretches of the shoreline.

Tarbert (created a Royal burgh by Robert the Bruce) has always been the main market for Knapdale and the first reference to a 'road' being built in this area appears in the Accounts kept by the Constable of Tarbert in 1326.

- *'John de Lany, Constable of Tarbert, from 18th April 1325 to 20th July 1326 – to William Scot in settlement with him of part payment of 20 merks (£13·3·4) agreed by the King for a New Road from one Tarbert to the Other -- £8 Scots.'*
- *'To ½ chalder meal, bought and issued at the King's precept to the said W. Scot for making said Road. 0·16·0 Scots.'*

Later, the Royal Charter of 1481 gives a list of the place-names in this area:

'Glannafeoch, Largbanan, Barnellane, Kowildrinoch, Glannafeoch, Ardpatrick, Ardmenys, Largnahowschine, Crevyr et Drumnamwkloch.'

Tracks and paths between the various houses and farms must have always existed, but roads were more or less non-existent. After the Jacobite risings in 1715 and 1745 things began slowly to change and a programme of road building was started by the local landowners encouraged by the Hanoverian government. The Commissioners of Supply, as they were called, held meetings, usually in May, and the minutes of these meetings make fascinating reading. Pont's Map of c.1590, copied and published by Blaeu in 1654, shows settlements and farms in this area and we can recognise many of the place-names, although not the topography.

Roy 1750

In William Roy's Military Survey of Scotland (1747-55), the road from Kilberry and on towards Tarbert shows no apparent bridge

across the river at Leargnahension Changehouse or Inn and seems to cross by a ford and then run down towards the shore at Loch Stornaway and on towards the farm on Ardminish.

The Kilberry rent roll tells us that the Changehouse and the farm on Ardminish were both rented to Duncan Campbell in 1750 and there is a letter from him to Lady Kilberry dated 12th December 1750 setting out an account for butter and cheese, and another item which perhaps can be guessed at!

'From Duncan Campbell Merchant at Ardmenish

12th Decbr 1750

Madam,

Lady Kilberry dr.

To 3 Stone Butter 6/8 --- 12·00

To 5 Stone Cheese ¾ --- 10·00

There is no botles (sic) *in Ardpatrick to spare.*

My friend has 2 do-zn to ye. Ye may send for them. They have run out of Botles at Dunmor.'

This could refer to French wine, smuggled in casks and decanted aboard ship into the customer's own bottles to decrease the risk of discovery by the excisemen.

In 1762 we find an entry in the Minutes of the Commissioners of Supply suggesting that the line of the road between Leargnahension and Ardpatrick is to be altered to a higher crossing of the river and to go inland of Ardminish hill. But a track must still have led to the farm on Ardminish which continued to be lived in and worked for many years.

'3rd May 1762

*Campbell of Knockbuy (*Kilberry*) to point out the proper line for carrying the High Road from Leargnahension to Ardpatrick.'*

Then in 1763, the next entry reads:

'4th May 1763

Petition for a bridge across the waters of Avenagillan on the West side of Loch Tarbert and Leargnahension in Kelislate which the inhabitants of Kelislate, south of Druimnamuchlack use when going to Market.'

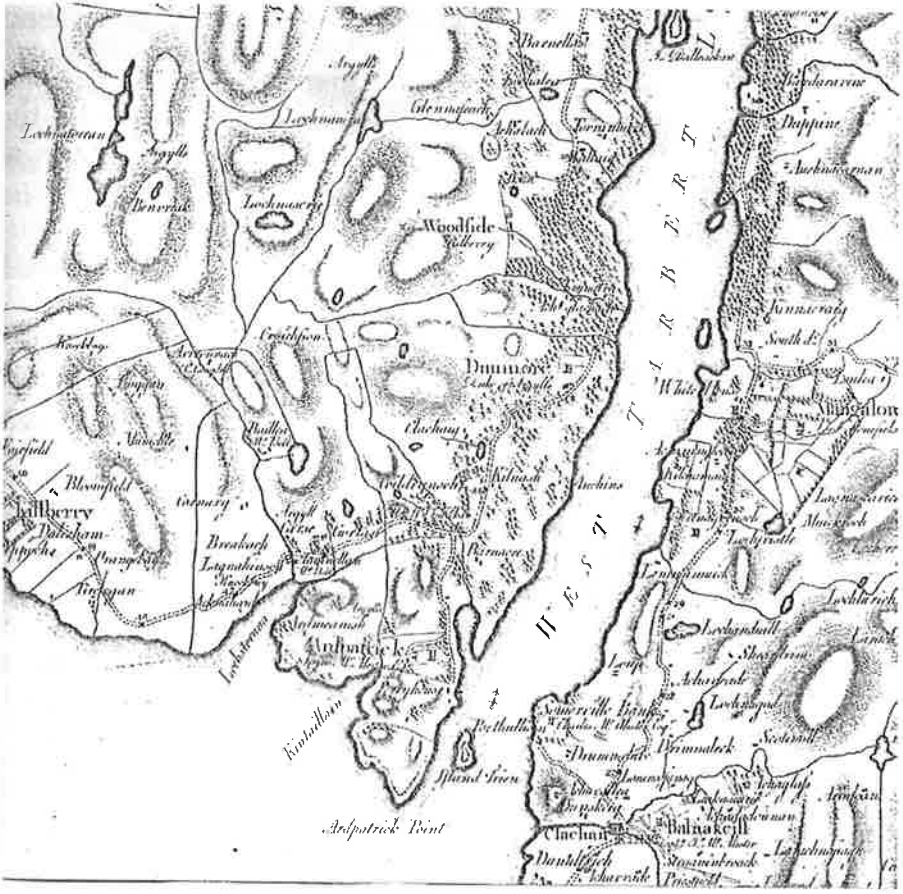
The exact whereabouts of Kelislate is not clear.

The second reference to a bridge comes in 1768.

'The bridge at Ormsary to be repaired and Knockbuy is appointed to secure estimates for building bridges upon the Water of Crarey [Campbell of Knockbuy lived at Minard, ed.] *and the Water of Leargnahension.'*

The bridge at Ormsary was a wooden structure and we now know that bridge at Leargnahension would have been of the same type.

We read in the diaries of John Blain, written in 1773, that he and his companions rode from Achahoish to Dunmore in one day, so a road and wooden bridges must have already been passable. They stopped for a 'refreshment' at the Inn in Ormsary but there is no mention of the Changehouse at Leargnahension.

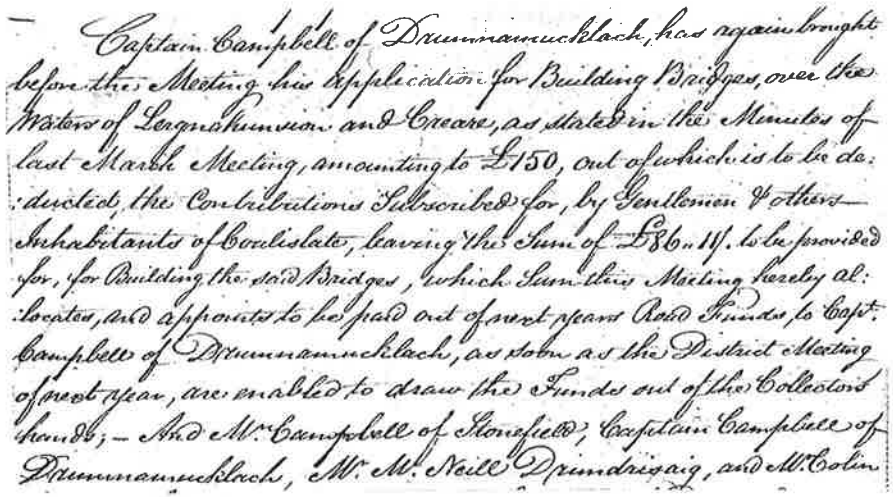


Map dated 1793

The Commissioners of Supply gave place to a body called the Roads Trustees in 1775 and we have no further information to add to our story until 1811.

> *'Where as the wooden bridge over the Water of Leargnahension has fallen into decay, there being at present but one plank remaining and that one rotten and dangerous to pass by. And the water of Cuilghatro which usually had a wooden bridge is at present without any at all. We, the Surveyors upon the roads connected with these parts... beg leave to recommend to the gentlemen and others... to erect proper wooden bridges over the Waters...'*

Subscriptions were collected to put up new wooden bridges, but already by 28th March 1815, we learn that Captain Campbell has been asked to get estimates to build what we assume to be the present stone bridge at Leargnahension. In June 1815 the sum of £150 was voted to cover the cost of two bridges, Crear and Leargnahension. The subscriptions of the 'gentlemen and others, inhabitants of Kelislate', amounted to £64-11 s. There is a list of those who contributed, including George Dow the exciseman.



Captain Campbell of Drummanuchlach, has again brought before the Meeting his Application for Building Bridges, over the Waters of Leargnahension and Creare, as stated in the Minutes of last March Meeting, amounting to £150, out of which is to be deducted, the Contributions Subscribed for, by Gentlemen & others Inhabitants of Coulislate, leaving the Sum of £86 11/. to be provided for, for Building the said Bridges, which Sum this Meeting hereby allocates, and appoints to be paid out of next years Road Funds, to Capt. Campbell of Drummanuchlach, as soon as the District Meeting of next year, are enabled to draw the Funds out of the Collectors hands; — And Mr. Campbell of Stonefield, Captain Campbell of Drummanuchlach, Mr. M. Neill Drimdrigaig, and Mr. Colin

Document 20th June 1815

By April 1818 we finally come to the actual construction of the present stone bridge when we are told:

> *'Mr Campbell of Drumnamuchlach gave in a report dated 27th March 1818 of the building and finishing last summer of a bridge of two arches across the water of Leargnahension. The cost in the region of £60 is approved.'*

We have no information about the craftsmen who built it or whether they used local stone. We do know that the bridge must have been of use to Captain Campbell of Drumnamuchlach when he built Carse House between 1824 and 1827 as he must have ridden between the two places.

In 1897, the year of Queen Victoria's Golden Jubilee, this stone bridge was widened but no further information can be found. The old bridge was finally by-passed in 2002 and the line of the road straightened.

The new stone bridge has been well designed to fit into the surrounding area. It is built with a single arch and is a worthy successor. Meanwhile, the old bridge, which has been re-pointed and the Victorian extension removed, will stand for many years to come.

Mr Murdo MacDonald has been largely responsible for the background information required to piece this story together and we would like to thank him for all his help and invaluable advice.

Information for the article has been gleaned from *Kists* 11, 17, 18, 44 and 47 – all of which refer to bridges and roads in Knapdale.

There are a number of points which it would be fascinating to clarify. Can anyone tell us about the area called Kelislate? Where the word derives from and the area it covers? Was the stone for the bridge quarried locally and where did the masons who built it come from? Lastly, can any information be found about the Victorian extension?

References

1. The map of Knapdale, part of Joan Blaeu's Atlas Novas, published in Amsterdam in 1654, forms part of the National Library of Scotland's Digital Library: www.nls.uk/digitallibrary/map/early/blaeu
2. The original is in the British Library, but copies are available in the National Library of Scotland.

THE MESOLITHIC-NEOLITHIC TRANSITION IN ARGYLL

Edward Tyler

Introduction

The change from the Mesolithic culture (a hunter-gatherer economy) to the Neolithic (a farming economy which involved the construction of stone monuments including chambered tombs) is of great interest to the Argyll archaeologist. Perhaps the biggest question is: how quickly did it happen? If the answer is that it happened very quickly, it leads to another question: did the Neolithic come about as a result of migrating tribes/clans who colonised new areas and brought their farming and religious practices with them?

Work by Schulting and Richards

A paper was published last year in the European Journal of Archaeology entitled: "The wet, the wild and the domesticated: the Mesolithic-Neolithic transition on the West Coast of Scotland" by R.J.Schulting (Queen's University Belfast) and M.P.Richards (University of Bradford). They argue that an orthodoxy is emerging that assumes the transition happened very gradually. According to this view, marine resources would have continued to be important on the coasts, with hunting and gathering persisting in the inland regions.

However, their work contradicts this, suggesting a very rapid and complete change in the subsistence economy coincident with the earliest manifestations of the Neolithic early in the fourth millennium B.C.

Schulting, Richards and others have begun a new line of inquiry using stable isotope analysis.

Stable Isotope Analysis

This is based on the adage "You are what you eat". Carbon and nitrogen from the foods that one eats are used to build and maintain body tissues over one's whole lifetime. The sources of carbon and nitrogen (and so the foods consumed) can be broadly

identified by measuring the ratio of the two stable isotopes of carbon as well as the two stable isotopes of nitrogen. The range of stable isotope values in a variety of foods is known, as is, at least in general, how these values are incorporated into body tissue. By measuring the values of body tissue, it is possible to infer what foods provided the carbon and nitrogen to build those tissues.

Carbon values indicate how much protein an individual consumed from terrestial sources, and how much from marine. Nitrogen values indicate the trophic level of an organism in an ecosystem; therefore it is possible to infer whether an individual consumed plants, herbivores or carnivores.

A new isotope for sulphur has also come under scrutiny. Along coasts terrestial organisms can have marine-like sulphur values, in combination with completely terrestial carbon and nitrogen values. This is due to a "sea-spray" effect whereby oceanic sulphur is transferred to the land through sea-spray and rainfall, and subsequently taken up by plants and animals feeding on those plants.

In order to carry out such an analysis you need samples of bone collagen.

Sites investigated

Crarae chambered tomb - courtesy of Derek Alexander

Schulting and Richards analysed human bone samples from the **shell midden at Carding Mill Bay near Oban** and the earlier Neolithic **chambered tomb at Crarae on Loch Fyne**. They also compared their results with other work carried out on human remains from the Mesolithic **shell middens of Cnoc Coig on Oronsay** (Richards and Mellars 1998; Richards and Sheridan 2000).

The samples were obtained from previous excavations undertaken at the sites. The Carding Mill Bay excavations revealed the remains of only wild (as opposed to domesticated) animals and a typical "Obanian" industry characterised by an absence of microliths and the presence of bevel-ended implements.

Crarae's chambered cairn sits in the lower garden behind the National Trust for Scotland's visitor centre. The site, which consists of a large grass-covered mound of stones, has a series of massive upright stones forming a façade at its eastern end. It was excavated in the 1950's by Jack Scott of the Kelvingrove Museum and was found to contain fragments of bone, teeth, sherds of pottery, hazelnuts and a flint arrowhead. Large quantities of cockle shells were found in the lowest part of the inner chamber. Some of the samples, which were sitting in the museum, were recently re-discovered and it is these that were analysed by Schulting and Richards. The Museum also possessed the Carding Mill Bay samples.

Results

The following quotations are taken from the article in the European Journal of Archaeology.

The stable isotope results from Carding Mill Bay show no use of marine protein, strongly suggesting...post-Mesolithic [dates]...Similarly, the [carbon] results from the Neolithic chambered tomb at Crarae on Loch Fyne, Argyll, show no contribution of marine protein in the diet of these individuals. This conclusion is further supported by the [nitrogen] values, which further suggest protein from predominantly terrestial animal, rather than plant, sources. This animal protein (meat, blood or milk) is presumably from domestic stock, as it seems highly improbable that people would

suddenly abandon marine foods in favour of wild terrestial game at this juncture...

In addition, stable sulphur measurements were obtained from two Neolithic human shapes from Carding Mill Bay. As noted earlier, the [carbon and nitrogen] values of these samples show no marine component to the diet, yet the [sulphur] values...indicate a strong marine influence. In other words, these individuals were consuming terrestrial foods – whether plant and/or animal – originating in coastal sea spray zones, strongly implying that they did live on, or very near, the coast during their lifetimes but chose to avoid marine foods.

It is likely that the majority of the protein in the diet of the individuals [from Carding Mill Bay and Crarae] was acquired from domestic animals.

The evidence from Cnoc Coig on Oronsay shows as complete a reliance on marine foods – approaching 90-100 per cent of the protein intake over a period of some years – as has been noted for the coastal Ertebolle in Denmark.

Conclusions

Schulting and Richards conclude that their evidence suggests a more or less complete shift to "novel" resources (i.e. domesticated animals and plants) at, or very soon after, the beginning of the Neolithic.

They go on to combine the isotopic evidence with the existing body of environmental and archaeological evidence for West Scotland.

As regards the Carding Mill Bay midden, they suggest that "its use into the earlier Neolithic... suggests that the site served as a temporary, special-purpose function for groups with an otherwise Neolithic economy, indistinguishable from that practised by those using the Crarae chambered tomb." As to function, they speculate that it could be the preparation of sealskins for clothing, footwear and boat and tent coverings; also the rendering of seal oil for lighting and heating.

In the case of Crarae, they point out that the site is in a relatively fertile area surrounded by rocky, hilly land. They suggest

that this fertility, rather than the site's proximity to marine resources, may have been a prime factor in the choice of location for the monument, which may have functioned partly as a territorial marker. "Also," they add, "the potential importance of the sea as a communication route should not be overlooked. Regardless of the possible "ritual" significance of the marine shells as a foundation deposit or funerary offering, they clearly played no important dietary role, and this is likely to apply equally to similar deposits of marine shells in other chambered tombs."

Mesolithic "hold-outs"

Turning to the Cnoc Coig (Oronsay) evidence, they comment that one of the individuals sampled had a diet which "shows the most extreme reliance on marine protein of any individual so far measured in Britain for the Mesolithic or any other period" – despite the fact that when the individual was alive (4030 – 3790 B.C.) the Neolithic elements of monumental architecture, pottery and domesticated plants and animals were already in place in other areas of the Scottish west coast." This leads them to the following interesting suggestion:

"At least some of the Inner Hebridean Islands may have retained – for an unknown but presumable quite brief period of time...a traditional economy in the face of the establishment of a fully Neolithic economy nearby...the implication is that more traditionally-oriented communities were under pressure from new Neolithic communities – whatever their origins – on the mainland and the larger islands, making competing demands on territories, and perhaps challenging earlier patterns of joint exploitation."

They admit such an idea is largely speculative at the moment, given that the sample size is so small, and that so far human remains from earlier periods are not represented on the Scottish west coast. Nevertheless,

"A similar scenario of a Mesolithic "hold-out" in a geographically marginal area has been suggested as one possible interpretation for three individuals with strongly marine isotopic signatures at the "Mesolithic" cemeteries of Teviec and Hoedic off the coast of Southern Brittany; these individuals have been directly dated to a

time when Neolithic sites are well attested within a few tens of kilometres. Yet, in neither case is there any clear evidence for interaction between the two groups; there is no pottery in the Oronsay middens, nor does it occur in the relevant levels at either Teviec or Hoedic. Again, it seems from the available stable isotope and archaeological evidence that it is valid to speak of two distinct groups following quite different life - ways."

Colonisation or no colonisation?

How did the introduction and uptake of domesticated plants and animals, not native to Britain, occur? Schulting and Richards suggest an interesting scenario:

"Colonisation...could have taken the form of small groups of incoming farmers and herders arriving with not only the plants and animals themselves, but also the requisite knowledge to successfully reproduce themselves in an uncertain and relatively harsh environment...Such groups are likely to have themselves been fisher-hunter- gatherers from elsewhere in Scotland, north England or Ireland."

They offer this as an alternative to the other two models which are usually cited, namely mass population movements from the continent, ultimately of Near Eastern origin, or indigenous adoption. These models lie at either extreme of the spectrum, and Schulting and Richards suggest something in between.

"The reality is more likely to have been a much more complex palimpsest of occasional precocious local adoption, acculturation, movement of individuals and small social units, and possibly some element of colonisation by larger, more organised groups from either the immediately surrounding areas or further afield."

Acknowledgements

The author wishes to thank Rick Schulting and Michael Richards for permission to quote at length from their paper. They have done further work on samples from Arran and the Ayrshire coast and we await publication with interest.

Thanks also to Derek Alexander, archaeologist responsible for the National Trust for Scotland's west region, for information about Crarae, for providing me with a copy of the paper and also sending me photographs.

16,000 YEARS OF SEA LEVEL CHANGE IN KNAPDALE

Stories from the peat and sand

Ian Shennan

Introduction

At different times over the past few years along the road between Tarbert and Loch Stornoway residents and visitors may have noticed a van from the Department of Geography at the University of Durham. While the occupants of the van, like other visitors, will have left with everlasting memories enriched by the unique combination of the landscape, sky and the wind, their reasons for coming to Knapdale in the first place were rather different.

Since 1998 we have been exploring the landscape of Knapdale for evidence of climate and environmental changes since the retreat of the last great ice sheets. Little did we know at the start of the work that we would still be finding new information 6 years later and that the results will hopefully put Knapdale alongside Arisaig, Barbados and Tahiti as locations in the World with the best records of changes in sea level for the last 16,000 years. In scientific terms, this tells us about the changes of the World's climate that caused the ice sheets to melt, about the balance between land and sea, and about the movement of the Earth's crust, all before any effect of global warming. What started 16,000 years ago still continues today and there's nothing we can do about it. Actually, it's mainly good news.

The geological picture 16,000 years ago

16,000 years ago the area would have looked rather like parts of Greenland today. To the north and east there was an ice sheet, with just the mountain - tops of a few Highland peaks showing. As the glaciers discharged into the sea, breaking off as icebergs, they released the ground-up rock that they had been carrying as they flowed across the landscape. This sediment fell to the bottom of the sea and here is where our story starts. Among the sediment are the microscopic remains of algae that lived in this inhospitable sea and

by collecting cores of sediment we can start to tell where the sea was at one time. In some areas of the world this story is simple, indeed rather uninteresting. No so Knapdale. Here it is rather complicated, but that's what makes it unique.

If the Earth was rigid and didn't move under stress then you could think of the oceans as a bathtub. As the ice sheets melted, so the bath would fill and you would see the level of the sea rise around the edge. The coastline would move upward across the land surface. But the Earth isn't rigid. The weight of ice causes the rocks of Earth's crust beneath the ice to deform, like squeezing a sponge. Let go of the sponge and it regains its shape. The same with the Earth. So when there was over 3500ft (1100m) of ice over Scotland the land surface was depressed. After the ice melted the land started to rise. But while the ice melted quickly, the land, as our investigations now show, is still rising today. This is part of the good news, for this offsets any sea-level rise caused by the "Greenhouse Effect", at least for a while.

With the amount of water in the global oceans changing and the land moving at the same time it is a delicate balance whether the coastline at any one location is moving up or down. This is what we've been trying to resolve over the last 6 years. The peat tells us when that part of the land was above high tide. The sand and mud can tell us when it was below the sea, or perhaps a tidal flat between the high and low tide at the time, or maybe it was a lake or a stream deposit.

The picture today – puzzle and paradise

Knapdale sits at centre of a geoscience puzzle and paradise. Drive along the road past Barnellan and Dunmore and you'll pass infilled valleys that once had lakes in, that prior to being lakes were embayments of the sea. They are filled with over 30ft (10m) of sediment with different species of algae that tell us whether it was freshwater or marine water in the valley. The col between East Loch Tarbert and West Loch Tarbert was once a tidal channel and Kintyre was an island. The site of the present Dunmore House was at the sea's edge around 15,000 years ago. Machair Loin was once a

large, sheltered tidal embayment that reached into Loch Cill' an Aonghais.

The glaciers scoured numerous hollows into the rock and following the melting of the ice these basins started to accumulate sediment. We have been putting boreholes down all around Knapdale to collect sediment samples from the basins to tell us when they were above sea level and when, if at all, they were below sea level. It is not possible to do this just by looking at the sediment with your eyes. We have to take the sediment cores back to the laboratory and use various chemical procedures to extract two types of fossil, pollen and diatoms. Flowering plants, as all hay-fever sufferers know, produce vast amounts of pollen as part of the germination process. A pollen grain, while very small (usually 20 – 80 microns), is very robust and in waterlogged sediment can survive many thousands of years (millions of years if the sediment becomes solid rock). Just as plants are quite different, so are the pollen grains each species produces. Some, such as grass pollen have a very simple structure (basically a sphere with a single pore in the surface), while others are very ornate, with detailed sculpturing across the surface. One of the most distinctive and attractive is the pollen of the Scots Pine. It has two air sacs attached to the main body of the grain. This helps it to be dispersed very efficiently and aided the migration of the tree into the newly deglaciated landscape.

In contrast, diatoms are small algae (10 – 200 microns) that can live anywhere where there is water and sufficient light to photosynthesise. From the different species found in the sediment we can tell whether the basin was a freshwater lake above sea level at that time or was flooded by the sea, or whether the peat formed in a salt marsh environment rather than as acidic raised bog.

We use radiocarbon dating to tell us the age of the sediment and our research so far lets us reconstruct the following sea-level history.

Sea level history of the past 16,000 years

At 16000 years ago the sea was perhaps 40m above present and fell for the next 4000 years to less than 5m above present. For

these 4000 years land uplift was greater than the addition of water to the oceans from the continued melting of the ice sheets in North America, Europe, Greenland and Antarctica. During this period Loch Cill' an Aonghais changed from a marine embayment to a freshwater lake as land uplift raised it above sea level. Then Machair Loin underwent a comparable change, from tidal embayment to freshwater marsh and then bog.

From about 10000 years ago to 6000 years ago sea level rose in the area, because the melting of ice from these areas was now faster than the rate of land uplift, which was slowing down considerably. When the ice sheets elsewhere in the world had retreated to approximately their current sizes, with no more water added to the global ocean, the slow but continuing land uplift produces a fall in sea level that started around 5000 years ago and is still continuing (though any future global warming would change this). As sea level fell the valley bottoms at Auchan and Barr na Criche changed from sandy tidal flats, to salt marsh, then alder carr and finally to the peat bog environments we see today.

All these changes in sea level over the last 10000 years would have impacted significantly on the coastal communities, sometimes with sea level rising, at other times with sea level falling. Fitting this in with the archaeology of the area remains a future challenge for our research.

The fieldwork and the laboratory work will continue for some while yet, so keep an eye out for the Department of Geography, University of Durham van and come as ask us what we are finding.

Editor's note

Mr. Shennan works for the Sea Level Research Unit in the Department of Geography at Durham University. The article arose from a chance meeting and the editor wishes to thank him for his time in writing something specially for Kist.

AFFINITIES BETWEEN SCOTTISH BRYOPHYTES AND TROPICAL FORESTS

Ben Averis

Whenever people talk about the mild climate of the west Highland coast, there will probably be some mention of the palm trees and other tropical plants which have been grown in places such as the famous Inverewe Gardens in Wester Ross. Far less well known is that the native vegetation and flora of this part of Britain actually has its own natural tropical affinities in the form of certain mosses and liverworts (bryophytes).

The bryophytes in question are mostly what we in Europe call oceanic species: the term oceanic indicates their restriction in Europe to western areas where it rains a lot and temperatures are equable with mild winters. The habitats of these plants are mainly humid, sheltered, rocky places in woods, ravines and north-facing hill slopes. The British Isles has the greatest concentration of oceanic bryophytes in Europe: this is not surprising because we, together with the Faroe Islands, have the most humid and equable climate in Europe.

The tropical affinities of oceanic bryophytes become evident when we look at their world distributions. Some are known only from Europe, but others such as the mosses *Daltonia splachnoides*, *Dicranum subporodictyon* and *Sematophyllum micans*, and the liverworts *Adelanthus decipiens*, *Colura calyptrifolia*, *Drepanolejeunea hamatifolia*, *Herbertus aduncus*, *Metzgeria leptoneura*, *Plagiochila exigua*, *P. carringtonii*, *Radula aquilegia*, *R. voluta* and *Scapania ornithopodioides* grow also in such places as temperate forests along the coast of western north America, and widely scattered tropical and subtropical montane forests in Africa, the Caribbean, south America, the Appalachians, the Himalayan foothills, Australia, New Zealand and oceanic islands such as Madeira, the Azores, Tristan da Cunha and Hawaii. The climates of these places show some similarities to those of Britain and the western European mainland. Many oceanic species belong to larger genera or families which are centred on tropical and subtropical areas. Exactly how some species came to have such markedly

disjunct distributions as Scotland, British Columbia and Himalaya is a mystery.

They might once had more continuous distributions which since became fragmented by climate change. Or they might have managed to disperse themselves very widely and colonize suitable habitats in far- flung parts of the world: dispersal by wind-blown spores comes to mind here, though some of these species are not known to produce spores in present-day Europe.

Whatever the reason for their disjunct distributions, their obvious tropical affinities are fascinating, and can be clearly related to climate. The British Isles can be seen as one of those places where the humid and equable climate of tropical mountains extends north and south along some continental margins. So far I have discussed tropical affinities on the basis of the distribution patterns of certain species. This is not the only way by which geographical relationships can be recognized. Rather than ask: which species grow here?" one can also ask, as I often do: "in what kind of way do plants (regardless of their identity) grow here?" The type of substrate on which bryophytes grow can reveal interesting geographical affinities and relationships with climate just as much as the identity of the species does.

In areas with a mild and wet climate bryophytes are remarkably abundant, and appear to have a longer growing season and an ability to spread and colonize new habitats fairly quickly. For example, the bark of trees and shrubs is a shorter-lived habitat than rock. In humid, equable areas bryophytes can be just as abundant on both types of surface, whereas in colder or drier areas they are relatively scarce on bark. Within Scotland this can be seen not only by the greater luxuriance of bryophytes on trees in the wetter and more equable west, but also by the way in which some species are mainly rock plants in the east but become just as common on bark in the west. Furthermore, in the far west some species grow not only on trees and tall shrubs but also on the shorter-lived habitat of heather stems. On Harris I found the scarce and normally ground-dwelling moss *Myurium hochstetteri* growing as an epiphyte on heather stems, marking an ecological link with its occurrences as a woodland epiphyte in the much warmer islands of Madeira, the

Azores and the Canaries. A more remarkable expression of rapid growth and colonization in response to humid, equable conditions is that of bryophytes growing on the living leaves of vascular plants. When growing like this they are referred to as epiphyllous. Even evergreen leaves such as those of holly and rhododendron are much more temporary than the bark of woody species, and can be colonized only by species which can grow quickly. In most places these leaves come and go before bryophytes get a chance to colonize them. Not so in the warm and wet tropical rain forests which are the world headquarters of epiphyllous bryophytes.

Remarkably, we also have epiphyllous bryophytes here in Scotland. Since my first findings in 1994 I have found them at 9 sites, all at low altitude in the Hebrides and the extreme western mainland. Most are not actually in woods. The most common epiphyll is the oceanic liverwort *Colura calyptrifolia* (itself a scarce species) which forms tiny pale yellowish tufts on the fronds of hard fem *Blechnum spicant hidden* away among tall heather on sheltered north-facing to east-facing slopes. Very rarely the equally small liverwort *Microlejeunea ulicina* accompanies the *Colura*. *Blechnum* fronds live for about two years, and *Colura* usually appears to take about a year or so to colonize as it grows invariably on the previous year's fronds. Even in the tropics, epiphylls grow mainly on longer-living evergreen leaves. On the Isle of Eigg in July 2002 I managed to find one tuft of *Colura* on one of that same year's *Blechnum* fronds - that is rapid colonization! Some people class small liverworts growing on filmy fems *Hymenophyllum* spp. or on large mosses such as *Thamnobryum alopecurum*, as epiphyllous, but I am not convinced that these are true epiphylls because they seem to creep along and among stems rather than actually establish and grow on smooth living leaf or frond surfaces.

Although these epiphyllous bryopyhtes are not in woods, their sheltered heathland habitats and microclimates are rather like those of woodland in miniature. I have, however, found epiphyllous bryophytes in a more wooded environment. In ornamental shrubbery in well-wooded grounds of The Lodge on Eigg I found the liverworts *Microlejeunea ulicina* and *Metzgeria fruticulosa* growing on the holly-like leaves of the Chilean evergreen shrub *Desfontainia*

spinosa. Incidentally, The Lodge gardens have a most luxuriant and interesting bryophyte and lichen flora on various trees and shrubs. On apple trees some thalli of the normally flat-growing lichen *Lobaria virens* grow in a strangely tubular, more erect fashion around unusually elongated shoots of the moss *Ulota phyllantha*, the tips of which protrude from the lichen tubes: could this kind of growth form be more characteristic of warmer parts of the world?

Nowhere else in the world have epiphyllous bryophytes been found so far from the Equator. The nearest contenders are some small liverworts on rhododendron, laurel and ivy leaves in SW Ireland (D. Synnott, pers. comm.), *Metzgeria fruticulosa* on box leaves at one site in Somerset and another site in Buckinghamshire (Porley 1996), the moss *Hypnum resupinatum* on bramble leaves in Norfolk (Stevenson 2001), and records from Spain, Madeira, the Azores, the Caucasus, Japan, China, British Columbia and the Appalachians (Porley 1996).

There may be more Scottish records in future, but it is clear that epiphylls are rare here. The tropical affinities of our Scottish epiphyllous bryophytes are all the more remarkable in that some of their locations are within shouting distance of exposed places with vegetation showing clear affinities with cold, northern, montane environments. Also these plants, and oceanic bryophytes in general, highlight the affinities which the western Highlands have with tropical environments while in contrast the eastern Highlands have affinities with very different cold, dry boreal environments. In this way bryophytes help to show us how Britain, small though it is, actually straddles a major divide in terms of different environments on a world scale.

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Editor's note

We are grateful for permission to reprint this article which first appeared in the spring 2003 newsletter of the Native Woodland Discussion Group.

THE JUDGE'S SEAT OF DARTMOOR

C. Studd

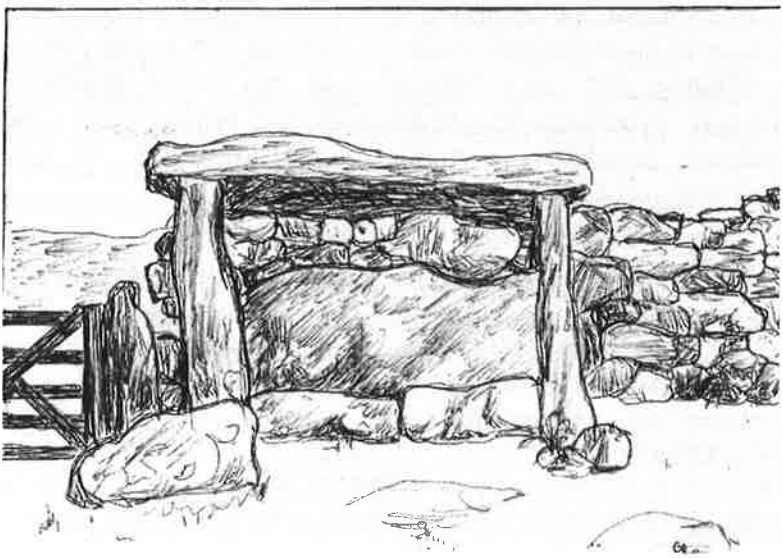
As one of the newer members of NHASMA, I wondered about the mound in the field alongside the Bellanoch to Crinan road that I passed regularly on my journeys from my home at Keills to Lochgilphead.

Recently I picked up **KIST 51** with Dr. F. S. Mackenna's fine depiction of Dun Domhnuill on the cover. So the mound is a "Judge's Chair", the Judgement Seat of the Lords of the Isles, alas totally vandalized.

It so happens that there is a very fine, completely intact, Judge's Chair on Dartmoor, near my old home at Dunnabridge Pound (Grid Ref. 648 784). It is located on the A384 from Tavistock to Ashburton, not far from Princetown.

The five-bar gate on my sketch gives a height impression of the Chair. I think the granite will last into Eternity...it's invisible from the road just outside. It gave me good cover for my sandwiches!

I would like to know from readers if they are aware of any other such seats in other counties. I know of no others, but presume there are more than two.



NEIL MUNRO'S FIRST PUBLISHED POEM?

Brian D. Osborne

Writing in May 1902 to the journalist John Macleay, Munro, revealed that he had, twenty years before, contributed poems to the Oban Times under the pen-name of "Bealloch-an-uaran" - the work, as he wrote, of "an industrious and most ill-inspired bard".

Search in the files of the Oban Times for the early 1880s has turned up the following poem:- *The Phantom Smack: A Lochfyne Fisher's 'Bar'*. It appears in the issue of 3rd February 1883 and is dated Glasgow, 20th January 1883. The nineteen-year-old Munro at this time was working as a clerk in Glasgow and did not find a job on a newspaper until April 1884.

The subject of the poem may have been suggested by a paper Munro wrote on the Loch Fyne fisheries for the Inveraray Young Men's Mutual Improvement Society.

The pen-name "Bealloch-an-uaran" will be familiar to readers of *John Splendid* - in Chapter XII John Splendid cries "I wish to God that I had a drink of Altan-aluinn at this minute, or the well of Bealloch-an-uarain." Bealloch-an-Fhuaran (as the Ordnance Survey has it) - the pass of the spring - is in the hills just a kilometre behind Inveraray to the south of Craig Dhubh.

The "bar" of the sub-title is more familiar to us as a "baur" in the Para Handy context - a tale or yarn.

THE PHANTOM SMACK

A Lochfyne Fisher's "Bar"

It's a tale of old forgotten days
That are now, alas! No more,
When Lochfyne had a fish to every foot
Of water from shore to shore,
When the skiffs of the hardy herring kings
Swept out at the close of day,

And their bark-tanned sails lay far and wide
From Otter to Aray Bay.

'Twas the good old *Shira*, as tidy a smack
As ever stood under sail,
Strong, clinker-built both fore and aft,
With a speed like the race of a whale!
I see her yet as we sailed that night
When the flowing tide was high,
John Bell (peace with him, a decent lad),
Dol Campbell, the "Rover", and I.

The nor'-east wind was blowing stiff
As we dropped from the Cadgers' Quay,
And merrily bowled the *Shira* forth,
With her main and foresails free.
We gave a "haloo" to the gunboat crew,
As we passed on her larboard side;
And we heard in our rear a parting cheer
As the friendly blue-jackets replied.

The brown-tarred fleet in a gallant line
Were sailing an eager race,
But the *Shira* left them far behind
When put to her showing pace.
She boldly cut thro' the white-capped wave
And the wind thro' the sheets blew shrill,
And we sang the song of *Fear-a-bhata*
As the moon came over the hill.

I sat on the nets on the leaward side,
And looked on the wave-beat shore;
I could see the gulls as they wildly flew
In the light of my mother's door;
I heard their scream o'er the sleeping land,
O'er the larch trees jagged form,
There was something wild in their eerie cry

That told of a coming storm.

The moon was hid by a watery cloud,
The dark had a deeper shade,
The light of the Kenmore left our view
As our course for the south we laid.
The dash of the waves on the *Shia's* bow,
And the pipe of the driving gale,
Soon drowned the note of our careless song
In the might of their deadly wail.

Then – just then, when all was black,
In the dark that so sudden fell,
We heard a sound in the whirling air
Like the toll of a funeral bell,
And a light bore down on our starboard bow
In the teeth of the flying spray,
And the phantom smack and her shadowy crew,
Tore past on her ghostly way!

(The phantom smack – she has sailed Lochfyne
Since our father's sires were young,
And for many a year that's past and gone,
Has her funeral warning rung.
She sails full-rigged 'gainst wind and tide,
With never a "dodge" nor tack
And we fishers know King Death is near
When we're hailed by the phantom smack.)

We shut our eyes till the vision past,
For we knew 'twas an ugly sight,
And nobody cares to see the form
That steers by that phantom light.
I muttered a Gaelic prayer again
I'd forgotten for many a year
(It's strange how a thing like that comes up
When we're chased by the devil or fear.)

When we looked again the vision was gone,
Like a hideous dream of the night;
The moon broke darkness that covered so thick,
And scattered our fears with her light.
The wind was spent, and it sank to rest
Leaving only a gentle breeze,
That sweetly bore from the freshened shore
The scent of the birchen trees.

Bound for the south the *Shira* sprang
Right heartily on her lay!
We shook out her reefs and donned her jib
To give her a swinging way;
We sung again of the *Fear-a-bhata*
As we swept on our rolling track,
And little we recked of the warning bell
And the light of the phantom smack.

* * * *

At morn, when the sun rose over the loch
With beams that were gray and cold,
Was seen on the hidden "stallion rock"
The wreck of the *Shira* bold.
Dol Campbell, the "Rover", and I were there
Clinging hard to the slippery mast,
Where we lay till the first of the herring fleet
Took us off as she homeward past.
Dol Campbell, the Rover, and I – no more,
For we left behind John Bell;
He sunk from our eyes by the stallion rock,
'Twas for him the warning bell.
I'm an old man now, but I'll never forget
The tale of that fearful night,
When we heard the dead man's warning bell,
And saw the phantom light.

It's a tale of the old forgotten days
That are now, alas! no more,
When Lochfyne had a fish to every foot
Of water from shore to shore.
John Bell (peace be with him, decent lad),
Dol Campbell, the "Rover", and I,
The good old *Shira*, I see her yet,
As we sailed when the tide was high.

BEALLOCH-AN-UARAN

SUMMER EXPEDITIONS 2003

A.O.M. Clark, with additional material from E.Tyler

Saturday 17 May. Gigha The weather overnight and in the morning was atrocious. As a result only eight hardy souls and one dog boarded the ferry at Tayinloan, in pouring rain. As we landed on Gigha the rain eased somewhat and by the time we reached the Gardens it had practically ceased. The admission hut was unattended, but sported an "honesty box" and a board describing the garden and its care by its devoted gardeners; the final 's' had been scratched out. If only one gardener was responsible, the well-kept planting, immaculate rosebeds and flowerbeds were nothing short of a miracle. The rhododendrons and azaleas blazed with colour, the woodlands were full of wild spring flowers; there were even a few waterlilies on the ponds. For surprise and amusement there was the occasional wooden sculpture unexpectedly appearing among the trees, and a very large pink wooden pig met the eyes of anyone who peered over the wall of the old pigsty. We ate our picnic lunch at the Viewpoint, but alas no view - the islands and the sea were engulfed in low raincloud and mist.

Saturday 21 June. Crinan Woods These woods, owned and cared for by the Woodlands Trust, are traversed by a varied and well-marked but unobtrusive path winding above the Crinan Canal between Crinan Basin and Crinan Bridge (opposite Crinan Ferry); it is steep in parts, but well

provided with steps and the occasional handrail. Our group met at Crinan Basin and, guided by David Batty, walked along the Canal bank, our attention directed to the late spring (and early summer) flowers and to the birds on the Moine Mhor, We crossed the Canal at Crinan Bridge (once "Puddler's Bridge" as the cottage beside it housed the man who repaired damage to the canal with puddled clay) and set off up the narrow pathway leading to the high part of the woods, stopping every now and then for David to pass on interesting information or point out something we might never have noticed for ourselves: birds-nest orchids, for example, and filmy fern "pretending to be a moss". It was a most enjoyable walk; the sun even came out - and some of us even heard the cuckoo.

Saturday 23 August. Skipness Castle A group of ten people assembled at the Castle, where Margaret McVicar gave us a very good summary of the history of the building, partly inside the curtain walls, pointing out remains from the various periods of the site, and partly outside the walls (where her audience was joined by several of the local sheep, muzzles pressed against the fence and ears spread in most intelligent fashion). We were fortunate in that the towerhouse was open and we were able to go through all the rooms, guided by Margaret's descriptions and the information boards. The views from the roof were most impressive. The short walk down to study St Brendan's Chapel and the graveyard by the shore closed a very pleasant, and instructive, afternoon.

Saturday 13 September. Burial Ground, Rubh' an Oib A sunny, bright window of a day after a spell of heavy rain. Knowledge of matters geological, floral, lower plant, fungal and lepidopteran ensured a fascinating walk in from the car park and picnic on the shore opposite the Fairy Isles. Many species of butterfly, fungae and lichen were noted. We found the Burial Ground of Achadh na Cille, now evident once more since the felling of conifers as part of a major landscape restoration project. All three Early Christian carved stones still in situ were located. The boundaries of the ground were also traced, partly marked by freshly pollarded ash trees. On the way back some of us walked up to the impressive Druim an Duim, hidden from the road which snakes round its naturally fortified slope. A slow-worm guarded the entrance.

Note on article contributions

Another plea about article contributions: if you are using a computer please submit in MS Word and keep it simple i.e. no pagination, no page breaks, no columns (apart from what the computer sets automatically) and stick to references at the end, not embedded footnotes. If the article arrives with any of these features, I have to undo them in order to make them conform to the Kist house format, thus creating extra work (in fact, some of these features cannot be undone!)

Don't let me put you off – keep the contributions coming and do contact me with an idea if you want to discuss something with me first. Email me on tyleredward@hotmail.com or telephone or write to me (details on back cover).

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Although the Kist does not specialise in family history, it has been pointed out to the Editor that there may be cases where we have information that would be useful to readers in search of their forbears. Requests should be sent to the Editor, should give as much detail as possible, and should be accompanied by a stamped addressed envelope for reply.