THE PEATLANDS OF BENNACHIE: An Introduction to Further Study

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The Peatlands of Bennachie

This is not a comprehensive report on the subject, rather more of an introduction to emphasise the potential for further study of the quarries, bogs and trackways of Bennachie. At an elevation of some 450 metres OD the Bennachie plateau was once extensive blanket bog, but past use by man has left an upland landscape that is now a mix of peat bog and pools, scoured and weathered bedrock and run-off channels leaving an environment promising many years of rewarding study.

Seven thousand years ago peat began forming on Bennachie, after the Ice Age and when conditions were such that it could develop. As soon as man discovered he could start and control fire it is likely that he looked for things to burn and give off lasting heat. Wood gives off heat, is easily accessible but, in many instances, can burn too quickly - as do forest fires started by lightning. Although frightening and spectacular, they soon speed through the landscape and burn out. A peat bog, on the other hand, when conditions become dry enough, can burn for weeks, if not months. Therefore, our early man might quickly have appreciated the benefits of a peat fire: readily cut when wet, easily dried when stacked, light to transport and store. In the North-east in the 16th and 17th centuries wood became a scarce commodity. The push to turn woodland into agricultural land led to its demise. What was left was needed for many things other than burning and it became precious. In earlier times, peat itself grew on the sites of previous woodland, burying and preserving the stumps for thousand of years. Cool and wet or warm and dry, the climate changed and man changed with it, adapting to each period.

Bennachie may have peat as old as anywhere in Scotland, albeit on a much smaller scale than areas like the Flow Country, and it was deep. Some mosses still contain a great depth of peat - see, for example, the paper by Christine Foster in this volume. But, what Bennachie had, that many of the larger mosses did not, was good accessibility. This it shared in common with many other high mosses in the middle of the North-easst and it has been used for millennia. One question to be explored is: how much has been used?

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Aerial photographs show that the Bennachie plateau was once extensively covered with peat and much, if not most, of it has now been used for fuel and turf. And when its potential uses are taken into account it is easy to see why so much has been removed. Nationwide, the uses that peat has been put to are legion, from fuel for heating by the local community to the mechanical extraction of the 1950s and 1960s for power stations and compost suppliers; bedding for animals - which in turn after soaking up urine and dung improves the land better than the poorer turves from the topmost layers. Peat has also been seen to have curative properties with traditional views proposing the healing powers of peat smoke as a cleansing 'antiseptic' inside the cottage. Wherever there has been a need for heat, then peat has been brought into use: for iron, lead, copper and tin smelting, pottery, brick and tile manufacture. In the construction of houses it has been used for walls and roofs. Agriculture has been a huge user of peat from raw turves to 'ess' (burnt peat and lime). Even the slurry left at the bottom of peat drains was dredged out and dried (Dutch-ashes) to be spread on the fields. Soap, polish, fabric dyes, Victorian mud baths and even as a tobacco substitute: all have been tried in the past. Peat smokes less than coal, and is well known for its pleasant aroma, having a far more pleasing effect on the nose than the acrid, eye-watering coal smoke. It was also easier on the throat when it was used to heat those elusive whisky stills, hidden away beside the burns of Bennachie, of which of course there were probably many. (Some might claim this to have been the best use of peat ever in Scotland!)

It may have been the easier availability of coal that sounded the death knell for peat as a house fuel (although the smell of peat smoke hanging in the air must have had a homely welcome after a day in the fields in Autumn and Winter). However, it must also not be forgotten that enclosure led to the removal of access to peat as a commons resource and that entrepreneurial venturers made a profitable business importing coal to a population that had lost its only other viable alternative.

Bennachie had (and still has) its peat bogs (Photos. 1 and 2), used formerly by the local settlements of Chapel of Garioch, Oyne, Premnay, Keig and others further afield. It is difficult to estimate how much peat would be needed by one croft; considerably more would be used by farmsteads and still more by the lairds' houses and in castles. It has been estimated that a traditional farm could use 1,000 turves per year: 300,000 in 300 years would amount to an area 40 x 100 metres at 1 metre deep (Ardron, 1999, 41). These figures were based on a farmstead in Cornwall so there would probably be some variation for Scotland, but they do give a useful idea of fuel usage per farmstead.



Photograph 1. Bennachie plateau from Nether Maiden showing worked out peat beds, giving indication of the scale of extraction. Now recolonized by Heather (Calluna vulgaris) and Mat Grass (Nardus stricta). (B. Foster)



Photograph 2. Looking west to Oxen Craig showing the eastern edge of the peat bed and the peat face (the dark strip across the centre of the photograph) with the upper plateau beyond. (B. Foster)



Figure 1. Study carried out in 1988 by James Mackay indicating the various depths and quality of the peat.

How much peat has been removed from Bennachie is impossible to quantify with precision and even a rough estimate would require some considerable calculations being carried out. But, the evidence on the ground is plain to see. For the purpose of this report it is enough to say that most of the Bennachie plateau is now devoid of peat to any great depth. Yet, on the higher plateau, a good depth is still available (Figure 1). This would seem to indicate that the need for peat had waned or that access to it was denied.

The last time peat was taken from the hill in any quantity was in the 19th century under the auspices of the newly appointed landowners (Figure 2). Previous to this the 'colonists' would have had a need for this available source of fuel and fertilizer to improve what must have been very impoverished soils on their crofts. The use of 'ess' may also have been employed. Ardron notes, "...many parcels of moorland in the Peak District were enclosed as unofficial small holdings by squatters and the lands thus treated [with ess], then sown with oats and potatoes" (1999, 51). Evidence for Medieval use is lacking from the plateau itself but may well remain to be found in some form or another: from pottery finds, casting methods or archival research and documentation. If the Mither Tap fort is indeed Iron Age it must follow that from that period (and probably earlier) the local population was



Figure 2. Part of Division map of 1857 showing plots allotted to the various benefactors for the removal of their peats.

making full use of the plateau resources. Hut circles and field remains at Woodend, Tillymuick and Mither Tap, with further possibilities around the colony sites, give a good indication of the potential for further discoveries.

Path-building between Oxen Craig and Little Oxen Craig has recently uncovered pockets of peat which may have been utilised in the past but had gone unnoticed by the peat cutters, although this is an area that had not been totally avoided as aerial photographs indicate.

A vegetation survey carried out in the 1980s (MacKay, 1988) gives a comprehensive layout of the remaining mosses above the tree line and an estimate of their varying depths (Figure 1). These appear to have been confirmed by the core sampling carried out by the School of Geosciences at Aberdeen University (Schofield, 2014). It seems likely (and presumably logical) that the peat on the skirts of the hill would have been utilised first, being easier to get to. This appears to have been a common practice on upland mosses of this type (Ardron, 1999, 123). With a limited area of plateau, the lower and sloping sides would have assisted drainage as the work was carried out. This may add strength to arguments made suggesting earlier uses of the peat resources on Bennachie. Most of the later 19th century removal was plateau-based. After the division of Bennachie in 1859,



Photograph 3. Heather covered peat working indicating small scale cutting showing cuts and banks (see sketch) and raised areas possibly for access and drying platforms. The linear banks crossing the centre of the photograph are of large scale removal 'turbaries' displaying a lighter coloured strip indicating extant peat and pools. (B. Foster)



areas were allotted to the various heritors on Moss Grieve. Prior to this, a dispute between the Laird of Balquhain and William Leslie (Minister Chapel of Garioch) in 1713 shows the lengths landowners and beneficiaries would go to procure their peats prior to the division. The Minister felt that collecting and carrying peat from his usual designated place or 'turbary' was not to his liking and was prepared to make a court case of the matter to press his claim (Miller, 2013, 37).

There is every reason that sites of archaeological interest might be discovered where peat has been removed. Although heather (*Calluna vulgaris*) regeneration has obscured the detail, such areas still retain a continuing acidic presence. Earlier occupation sites leave little evidence, although finds of pottery are possible where



Photograph 4. Aerial photograph of peat road south of Oxen Craig showing roadside activity of banks and cuttings. (Photo. courtesy of the Bailies of Bennachie).



Photograph 5. Irregular cutting on Moss Grieve (right side) and the Division banks of 1859 (as per Figure 2). (Photo. courtesy of the Bailies of Bennachie).

long-term extraction has taken place. Many months each year were spent cutting and stacking the peat and this must have left its mark. Closer inspection may reveal lithic (worked stone) examples at the bases of some of the banks and this might take the finds record back even further. However, and as a note of caution, it has been recorded from other sites that lithic finds on lowland sites adjacent to upland peat extraction may be the result of artefacts being carried down by turf extraction for the fields and thus giving a false interpretation of their place of origin. Although it may be a forbidding place today when exposed to the wind and rain, there were times in the past when the weather was kinder and the plateau would have been a more comfortable place to settle. So, too, for shortterm periods of settlement involving collecting peats, herbs and fruit, caring for stock or visiting the 'fort' on Mither Tap for whatever reason. Bennachie will always have attracted visitors through the ages!

Scope for Future Work

Further research needs to be carried out to determine how far back in time peat extraction extends and which areas were used for this purpose. MacKay's 1988 survey would provide a good starting point. Also, a consideration of the methods used to cut and transport peat, coupled with an analysis of the routes used to carry it down Bennachie to the many settlements and lowland farms around its base is essential. Tracks and pathways are numerous on Bennachie, from the leisure and sporting access routes of today's pleasure seekers, to the Maiden Causeway above Rowan Tree heading up towards Mither Tap and maybe beyond. Many are now obscured by modern walkers' paths and heather regrowth. But, early maps indicate some of the older routes that would have been of a more practical nature for the carrying of peats and stone. All need further investigation to bring the threads of the Bennachie tapestry together.

Although peat cutting no longer takes place on Bennachie it has left an environment unique as an upland site and to which nature has become adapted. Botanical, entomological and faunal surveys will, therefore, also be of great value in the furtherance of this research.

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