

Have we discovered the site of the Cook family's cottage at Aireyholme Farm ?

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The movement of the family of James Cook, later to become Captain James Cook, from Marton to Great Ayton in 1736 or thereabouts is well chronicled. At this time James's father was appointed by Thomas Scottowe as his farm manager at Aireyholme Farm and presumably was provided with an appropriate cottage or suchlike. As far as we are aware very little, if anything, is known about either the type of accommodation or where it was situated relative to Aireyholme Farm itself. In this article we report research by members ca. 2002 of the Great Ayton Community Archaeology Project (GRAYCAP) which we believe provides the evidence for the likely site for the accommodation in which James and his family lived during this period.

GRAYCAP was formed in 2002 and initially had about 20 active members who met weekly on Wednesdays. Within the team there are a wide range of skills and members have researched numerous historical topics in relation to the Great Ayton Parish, these have included projects from the Mesolithic period (4000 BC) to current day where buildings have been recorded prior to demolition / developed.

As one would expect for a community in which James Cook spent a significant time of his formative years information relating to James during this time of his life creates considerable local interest. In the formative period of GRAYCAP old maps, documents and photographs were obtained and used to research aspects of local interest. As part of this process some photographs were obtained around 2002 from the Whitby Museum which had been taken ca. 1930 in the Ayton area and recorded aspects of life and scenes around Ayton and in particular Aireyholme Farm. One of these photographs (see Figure 1a) showed an image of the then tenant farmer, William Martin, standing on the edge of a cultivated plot with some conifers (larches) in the background. Information written on the rear of this photograph stated that it showed William Martin standing on the site of the Cook cottage. Bearing in mind that since the Cooks lived at Aireyholme only a few families have been tenant farmers it does not seem unreasonable, in view of son James's fame, that word-of-mouth within subsequent families / generations of farmers tenantry Aireyholme Farm could provide this information. If William Martin had received this information from either his forebears or previous tenants surely he would have been amiable, and proud, to pose for such a photograph.

Assuming that the information on the rear of the photograph is genuine, then the obvious question is: where was the photograph taken? The photograph shows larch trees in the background and what appears to be cultivated ground in the foreground. Examination of early O.S. Maps showed a small, unidentified rectangular plot near grid reference NZ576115 and members of the GRAYCAP team visited this site to establish whether this was a potential site for the Cook cottage. The larch trees which are currently on the southern end and eastern edge of the plot seemed to match reasonably with the larches in the William Martin photograph. One of the authors of this note (AB) set out to a) obtain a photographic match between the trees in the photograph ca. 1930 and the trees in 2002 and b) and to age the trees of ca. 1930 and 2002.

a) photographic matching of the trees in the photograph ca. 1930 and the current trees.

Various digital photographs were taken of the larches which are present on the eastern edge of the possible site, these images were manipulated and matched to show the same area as that of the ca. 1930 photograph. The aim was to match the basic characteristics of the current trees with those in the ca. 1930 photograph.

The images in Figure 1a and 1b show the ca. 1930 photograph (1a) and a current-day photograph (1b), taken in 2002. Bearing in mind there is over 70 years of additional tree growth in 1b relative to 1a the match is sufficiently good for us to conclude we are photographing the same site.

Figure 1a - photograph of tenant farmer William Martin on the site which is allegedly that of the Cook family cottage near Aireyholme Farm.



Figure 1b - Photograph taken in winter 2002 of the same site as shown in Fig. 1a



b) Ageing the trees

It seemed unlikely that the same trees on this site were present when the Cook family were in residence, however, to establish whether this was the situation we decided to attempt to age typical larch trees in the area.

The most reliable method of ageing trees is to count the number of rings in the trunk when the tree is cut down. However, for the purpose of this project we followed the methodology described by Alan Mitchell in his identification guide for trees entitled *Trees Of Britain and Northern Europe* ISBN 0 00 219213 6. Although the height and spread of a tree vary with the age of a tree, neither of these can be used to age a tree. Fortunately the circumference of a tree increases during each year of its life. Many measurements and much research have shown that for a very wide range of trees with a full crown, the girth (at ~ 5 feet from the ground) has a mean growth of one inch a year. The age / girth relationship depends on the situation the tree is growing i) for a tree in the open the girth in inches equals the age in years; ii) a tree growing in an avenue of trees or with trees nearby the age in years equals 1.5 times the girth in inches; iii) for a tree growing in a wood the age in years equals 2 times the girth in inches. Thus a tree of 4 feet girth growing with no other trees nearby will be about 50; about 75 years old if slightly hemmed in by other trees and for a woodland tree it will be 100 years old. The larches in the photographs are covered by situation ii.

To estimate the girth of the trees in the ca. 1930 photograph the author used data on the tree in the r.h.s. of the photograph. It appears that the width of the William Martin's head and the diameter of the tree in Figure 1a are approximately equal. Since we could not measure William's head it was assumed to be the same as the width of one of the author's (AB) head, which was determined as ca. 7" and corresponds to a diameter of 22". In 2002 the girth of this tree was 68". Applying Mitchell's calculations to these two girths in the type ii growing situations we determine the tree's age in ca. 1930 as 33 years and in 2002 102 years. These calculations indicate a difference of ages between ca. 1930 and 2002 of 69 years: this is remarkably close to the actual difference i.e. 72 years, if 1930 is assumed for the William Martin photograph. These larches on the eastern edge of the site being close to 100 years old would give a planting date close to the end of the 19th Century. This time of planting corresponds well with information from some historical documents which recorded the planting of very large numbers of trees, including larches, in the late 1890's. However, although we were able to use the existing larches to identify the Cook cottage's site, these larches are much too young to have been growing on this site when young James Cook was active on this area (circa 1740).

The diagram opposite shows an aerial photograph of the area around Aireyholme Farm (copyright GetMapping) with the proposed site for the Cook family cottage highlighted with an arrow. The site is just inside the south-east boundary of the National Trust's Roseberry Topping property and can easily be reached on a public foot-path from Aireyholme Farm lane.

