## C<sup>14</sup> Radiocarbon dating of Hermitage in Gauber High Pasture Ribblehead



A Batty 2017

Front cover. Workshop at the Hermitage.

Photograph A Batty.

## Hermitage in Gauber High Pasture Ribblehead.

In the early 1970's Mr Allan King excavated an archaeological site in Gauber High pasture at Ribblehead (King,1978.) This became known as a Norse/Viking farmstead. However the evidence fails to support the above interpretation, which is still being perpetuated in more recent academic publications. We commenced research into this problem in the 1990's and this has continued up to the present day.

We have now carried out a considerable amount of research, several papers have been published (see bibliography) which are available on this website setting out our findings and interpretations. At the time of excavation several artefacts were found including coins which were minted around 860AD. This provided a possible date for the occupation of the site. No radiocarbon dating was carried out to provide a secondary source of dating evidence.

The photograph (Plate1) shows the structural remains of a building at the final stage of excavation, this was identified as a workshop. The important points to consider in the photograph are the remains of a hearth in the centre of the floor, and also the possible trampled remains of an earthen floor. The site was not backfilled after excavation (pers comm–A. King.) so any soil and grass cover has occurred since the excavation. This has resealed the post excavation remains including the possible earthen floor, this means that any deposits within the present floor remains are in situ provided no disturbance by bioturbation or small mammals has previously taken place.

In April of this year mole activity within the workshop produced three molehills (Plate2) one of which was adjacent to the hearth. A sample of this mole hill was taken for microscopic examination, residues representing human activity were identified as charcoal, hammer scale (Plate3) and burnt sandstone fragments. The charcoal was sent to SUERC for radiocarbon dating, the result is shown (Fig1) confirming occupation of the site in the Anglo Saxon period.

## Conclusions.

The dating of the Hermitage has up to now been based on coin finds which are allochthonous evidence (brought in from outside), as opposed to charcoal and hammer scale which is autochthonous evidence (created on site). The latter has the potential to be more reliable for dating a settlement site. In this instance both radiocarbon and coin dates are cotemporaneous, providing a high degree of certainty that the site dates to the Anglo Saxon period. Acquiring more radiocarbon dates from the sample could mean that Bayesian statistical analysis can be applied to these possibly achieving a narrower date range. The current date range at 95.4% probability is 194 years, occupation of the site may of course have covered this period of time but the radiocarbon date does no more than show that occupation occurred at some time within this period.

One of the problems for precise dating in the Anglo Saxon period is a flat line in the carbon curve shown in the centre of fig.1 this creates a widening of the dates in this

period. Given this problem we have been advised by the staff at SUERC that further radiocarbon dates may not provide a narrower range of dates. The probability that the site dates to 890AD or earlier is 30% greater than the probability that it dates to 890AD or later. (Price, 2017.)

This may possibly be as far as research can take us in trying to determine the correct identification of this archaeological site. Over several years we have put together a considerable body of evidence with the first identification of several locations on the Abbey charter, boundary perambulations, enabling us to narrow down the location of the Hermitage to the site in Gauber High pasture.

Over the years one of the main arguments used against our research has been that Hermits live in isolation in small cells or caves and are not farmers. There is an increasing body of research and publication out there to show that some Hermits were given land by the heirarchy, and farmed it to maintain themselves-this was after all a precursor to the much larger scale system of the Abbey's, with both systems being based on the donation of land by the wealthy, who did this in the belief they were buying themselves favours in the next life.

We have now radiocarbon dated thirteen Anglo Saxon period sites in our local area and we know of several others which are likely to date to this period. Some of these sites have more than one structure which could be classed as a dwelling. This shows that there was a considerable population present in this period, and has now shed some light on the so called dark ages in our local area.

## Bibliography.

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All the above are available at www.ingleborougharchaeology.org.uk.

King A. (1978) Ribblehead. Current Archaeology No 61 pp 38-41.

Price J. (2017) Personal email concerning mathematical calculations.





Plate 1. Workshop at the Hermitage showing hearth roughly in centre of floor. Location of sampled molehill is shown by red dot. *Photograph A King.* 



Plate 2. Showing 3 mole hills, sample taken from centre one, the stone to the right has recently fallen from the side. *Photograph A Batty.* 



Plate 3. Hammer scale.

Photograph A Batty.

