

Earth Lodge Construction Anam Cara 2008

We have had a notion for some kind of structure built into the hillside for a couple of years, like any whacko idea, it takes time to mature. But mature it did and having selected a wee nook at the bottom of the croft, digging started in earnest in the Autumn 07. The site lies on a south facing slope at the lower end of what was the raspberry field (for those acquainted with the croft). The field has supported the rasps for the last twelve years, native trees have been planted over the last two years and will take over as the rasps die off. Given a few years for the land to re-establish itself, the structure will be near invisible.

The site was dug well in advance of the building as we were anxious to see how waterlogged the site would get through the winter and ponder on drainage options. There was also the need to just sit with the reality that we had actually started and ponder how it was all going to be pulled together. We had no plans of any sort, this building was very very bespoke!!

Happily the site faired well with good drainage although a small spring did appear at the rear of the site after particularly heavy rains. A drain was dug around the perimeter using a 4inch flexible coil back filled with chips



Excavation work, with a final maximum depth of eight feet the site seems well drained, although the subsoil was very hard.

Stone was obtained from Achilty Quarry Contin and was delivered to the site for £21.00 /ton a total of fifty tons was required. A rough circle 5.5m in diameter was etched on the ground and the building began under the watchful guidance of Master dyker Dave Goulder. The Achilty stone has the great advantage of being very regular in shape and a joy to build with which was just as well as nobody in the 12 person trainee building crew had ever built a dyke before. The base was approximately 1m wide tapering out to 500mm at a height of 2m The back wall was effectively a retaining wall and consumed more stone than the more regular front (proper dyke) wall. A four day training event in April, saw about three quarters of the wall constructed.



Work in progress, note the fire place

We had a notion for some kind of altar and this little beauty presented her self.



The Achilty stone is apparently some form of granite, yet has a soft feel, the colour is predominantly grey with flecks of red and pink.

The altar stone gets pride of place, facing you on entering the building.



We built in a number of ledges and nooks in the wall to accommodate tee lights and the like. Plus the odd large stone..... just because it was there!!



The door points due east, note the attempt to cap the top of the dyke with flat stones.



First of two layers of the ring beam, the second layer was off-set and the whole thing nailed together. Note the chimney, although the final position of the wood was further away from the flue.



The reciprocal roof comprised nine main poles interlocked as per the picture. The first pole is held up by a vertical support and each successive pole laid on top of the previous pole. The final pole is simply tucked under the first pole and the support removed. The resulting lattice is very strong but we elected to bolt together each interlocking pole each of which is bolted to the ring beam.



All additional roofing poles were then laid on top of one of the main poles and attached top and bottom. We were keen to have at least 1M overlap on the wall, partly to ensure water is shed well away from the wall but also to provide a counter balance for the weight of the soil covering over the main space.



The completed roof showing the sky light, vertical supports and additional spacers close to the ring beam. The beam was thus supported in three places plus the reciprocal joining at the centre. It was roughly estimated... very roughly estimated that with the overhang beyond the wall the uprights were close to a point of weight balance on the roof.

The poles were predominantly sitka and larch and numbered about 130 of various length and diameters. They were cut locally and debarked using a draw knife. If kept under cover after debarking and allowed to dry naturally the poles remained mould free. Our thanks to Douglas and Heather Hardie for the kind permission to pillage their pine forest.



With the roofing poles secured, they were covered with a thick layer of rank heather, the woodier the better. This provided good support for an insulating layer of straw. Butyl rubber was then laid over the straw, topped with carpet to protect the rubber from the final topping of grass sods to the tune of 3-4 inches.



Turfing almost complete, note the hillside landscaped to allow good water runoff.



Wood burning stove is the only source of heat, note the cob floor, straw was used to try and draw the moisture from the floor as we were now entering a wet autumn with little drying power.



The 4 inch cob floor was laid on a 4 inch bed of gravel . The cob was about 70% sand and gravel aggregate and 30% clay with a liberal sprinkling of straw and water as required. It was mixed, two wheel barrow loads at a time on a heavy gauge plastic sheet. The mix was puddle under welly boots and turned regularly by rolling the mix on the sheet until the mix held together in a ‘sausage’ kind of a shape.



A team of happy dykers

Building commenced in the spring 08 and was more or less completed by the autumn. Our hearty thanks are extended to all the enthusiastic souls that participated in the building process. More particularly to Nathan, Dominique and Donald for their input throughout the season and then of course Arthur for the use of his fine body and demonstration of wheel barrow manoeuvring!!