

All structures within our Iron Age area are built to match the original excavated footprint of each site. This includes post size and spacing. The materials used to construct each house are sourced to match those that could have been found in the landscape, local to the excavation, at the time the original structure was built, and construction techniques are based on appropriate available technology.

LITTLE WOODBURY ROUNDHOUSE

Aim: To explore the engineering and construction of a major two-ring Wessex house and to record the material quantities required to build a house of this scale. This building is based on an excavation from just outside Salisbury of a 14.5 metre diameter Roundhouse. In our recent re-thatching (2018/19) 7 tonnes of thatch were used for the roof, requiring an estimated 10 acres of land to produce this historic yield. The oak used in the frame and walls weighs 12 tons, the rafters are ash and elder weighing 4 tons with 1.5 tons of hazel in the wattle and 20 tons of daub.



MOEL Y GERDDI ROUNDHOUSE

Aim: To explore the engineering and construction of a smaller two-ring roundhouse. To explore the use of a back door, the running of a fire in a sunken fireplace in the floor and monitor burning under the hearth. This house is based on excavations from Harlech in North Wales. In 2009 we noticed the main posts were all showing signs of decay and experimented to see if they could be replaced in situ rather than rebuild the house. Each post was removed and a new post (with charred end to prevent rotting) slotted into place. This process was successful and shows one possible way a roundhouse could have been maintained. The internal walls are decorated with patterns derived from Iron Age Celtic Art, found primarily on metalwork from around the British Isles, painted in red, black and yellow ochre.



GLASTONBURY LAKE VILLAGE ROUNDHOUSE M59

Aim: To explore the engineering and construction of a lightweight roundhouse as found on a lake village, with exploration of alternative materials and minimalist construction. The wattle walls are made of willow covered in daub and the thatch is water reed, the Glastonbury house walls are much thinner than our other roundhouses. It was important that the houses were light due to the marshy ground of Glastonbury lake village - some excavated houses were found to have as many as ten clay and brushwood floors on top of each other, a new one having been added as each previous one sank into the marshy ground. This house was chosen as it was one of the smallest on the island. We originally thatched this in a ring method to minimise the amount of thatch needed to keep the structure light, however in 2019 it was re-thatched using the slope method to better preserve the thatch and reduce rotting. The walls are painted with liquid clay using natural pigments of ochre and hematite.



GLASTONBURY LAKE VILLAGE ROUNDHOUSE M74

Aim: To explore the engineering and construction of a lightweight roundhouse as found on a lake village on the Somerset Levels with exploration of alternative materials and minimalist construction. Built with similar construction methods to M59. This house was chosen as it had the best preserved floor and is unusual as it doesn't have a door pointing towards the morning sun. The colour of the paint on the outside is yellow ocher, a natural mineral which is found in the Mendips, a short distance from the Somerset Levels.



DANEBURY HILLFORT ROUNDHOUSE CS1

Aim: To explore the engineering and construction of a plank built roundhouse and to construct and observe a packed chalk floor. We have also used this roundhouse to show a space furnished/dressed to Iron Age standards. Evidence of a slot trench in the original excavation from this hill-fort near Andover, Hampshire, appears to show that the walls were made of wooden planks rather than wattle and daub. We also experimented with installing a sliding door to this roundhouse as speculated from the archaeology, however the doors proved difficult to slide and were unstable. They were replaced by planked doors which swivel on a vertical pole.



DANEBURY HILLFORT ROUNDHOUSE CS14

Aim: to investigate the construction of a stake built roundhouse with the use of very little large timber and coppiced poles instead. The wall line of this roundhouse excavated at Danebury Hillfort near Andover, Hampshire had no distinctly surviving structural remains barring a few stake holes suggesting it was stake built, the commonest type of house built at Danebury. Stakes were set in holes driven into the underlying soil or chalk using a crow-bar like implement. The stakes formed a vertical framework for a wattle wall woven into position, forming a rigid earth-fast drum joined to the doorposts. Danebury Hillfort is close to an extensive riverbed so willow, which would have been plentiful, was chosen for weaving between the closely spaced hazel wall stakes.



OTHER IRON AGE STRUCTURES/ EXPERIMENTS

- **Chicken House** - an exploration of commonly found four post structures in Iron Age contexts and what they could represent.
- **Granary** - the construction of a working granary based on a four post structure and the use of carpentry to make a secure structure avoiding the use of wooden pegs or nails. We used this structure to store a years worth of grain as required by an Iron Age family and to successfully prove the viability of the grain after a year in storage.
- **Iron Age Toilet** - another exploration of four post structures.
- **Nine Post Structure** - an exploration of a nine post structure as a thatched shelter/ storage area.
- **Storage pits** - one of the earliest experiments at the farm and based on those excavated at Danebury Iron Age Hillfort, a pit was dug into the chalk, filled with grain and capped with clay. Our experiments have shown that even after a year of storage the grain was viable.
- **Bread Oven** - construction of wood fired bread oven within the Moel y Gerddi roundhouse.
- **Totem** - representative of single post structures often found in the centre of an enclosure or settlement.
- **Water Flow** - digging and maintaining drip trenches to observe water flow and interaction between the buildings and erosion and deposition of materials moved by water flow as well as growth caused by retention of moisture flowing across site.
- **Garton Station cart** - construction of an Iron Age cart based on the finds from a chariot burial at Garton Station, East Yorkshire.
- **Two Post Drying Rack and Lathe** - representative of what excavated two post structures may indicate.
- **Enclosure Ditch and Bank** - surrounding the Iron Age enclosure is a ditch and bank, constructed in an octagon shape to allow us to monitor how erosion of the ditch and bank varies according to the compass alignment of the eight sides. We are also monitoring the effects of allowing animal grazing on the external surface of the ditch and bank of the enclosure.
- **Roundhouse Roofs** - exploring the workings of thatch and roof space including smoke ceiling height, filtration through the thatch, containment of combustion gasses and oxygen levels, deposition of tar, preservation of food, pest infestation and the impact of different thicknesses and methods of thatching for insulation, rain water run off and drying and durability.
- **Herb garden** - to reflect the variety and uses of Iron Age herbs.

