

# Neolithic wheat trial at Hengistbury Head Visitor Centre

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Prehistoric gardening anyone?

This was the challenge to the gardening team from Gabrielle (Delbarre, Curator at Hengistbury Head Visitor Centre) - linking items in the collection, to the garden. There were many possibilities but for our first attempt we decided to grow a small quantity of wheat.

Within the time span of human occupation and land use at Hengistbury, growing grain comes in about a third of the way down, that is after late upper Palaeolithic (c.12,000 years ago) hunter-gatherers with their cold climate, after Mesolithic (c.9,000 years ago) hunter-gatherers with their warmer climate, rising sea levels and nascent woodland and into the late Neolithic/New Stone Age period (c.5,000 to 4,000 years ago). With a warmer climate on the now isolated island of Britain, there was pine forest and dense woodland, the first pottery appeared, wild animals were hunted, pigs and cattle first domesticated and agriculture began (barley, wheat), leading to deforestation. This period saw a changing way of life with the settlement of communities giving rise to permanent occupation. People could put down roots, live a settled life. Evidence of stone tools and pottery indicate that a large community occupied Hengistbury about 4,000 years ago, producing a wide range of weapons and tools, garments made from skin as well as woven cloth and pottery. Trees would have been felled, pockets of land cultivated, primitive varieties of wheat and barley grown.

Having recently visited Butser Ancient Farm in Hampshire, which specialises in experimental archaeology, I decided to request their advice and Simon Jay, their Director, very kindly offered to supply us with a few Emmer and Einkorn wheatears. Both are ancient forms of grain dating from around 10,000 years ago, originating in the wild in hill country of the Fertile Crescent of the Middle East, cultivation spreading to mountainous regions of Europe and Asia. Emmer gives good

yields on poor soils and is resistant to fungal diseases. Einkorn is lower yielding but can survive on poor, dry, marginal soils. Emmer is said to make good bread, has been used as whole grain in soup in Tuscany and used in beer production. The grain and bread can still be found in European shops. Einkorn is mostly eaten boiled in whole grains or in porridge. As flour it lacks the rising characteristics required for bread. It is also used for bulgur and as animal feed in some mountainous areas. These grains represent ancient varieties that may have been grown at Hengistbury, perhaps passed on or exchanged by visiting people.



Very quickly the precious package arrived in the post and the gardeners gathered around the table to begin the process of separating out the grain. Individual wheatears were rubbed between gloved hands, removing the chaff and leaving the seed still in the husk, the husk then being prised open to reveal the actual seed. Seeds were stored in paper bags awaiting sowing.



The next challenge was to investigate methods of land cultivation and tools used. Gabrielle put me in touch with archaeologist Martin Green who advised that whilst there are very few prehistoric tools with an exclusive gardening interpretation, there are some under the broader

term of agricultural/gardening. Of these, he suggested Neolithic flint picks were probably hafted onto a handle and used for cultivation in a similar way to the modern mattock, roughly breaking up the ground. Antler picks could be used similarly, although there is little evidence for this. There is evidence of 'spade marks' from a number of prehistoric sites in the UK – presumably some sort of wooden spade was used. For harvesting, simple blades have been found with edge gloss on them suggesting they could have been mounted in a handle and used like a sickle. Axeheads could have been used for pruning/coppicing as well as felling.

Simon Jay advised that sowing in autumn helps the wheat get ahead of the weeds, but that at Butser they often get great results by sowing between March and April and keeping on top of the weeding. It was decided we would sow half the seed in spring and half in autumn to compare yields and ease of cultivation.

In our small garden with limited space we could only grow very small quantities, but this would at least provide an illustration, and link to the ancient inhabitants of Hengistbury. The ground was thoroughly dug and weeded before being raked to a fine tilth and finally, in the first week of April 2017, the grains of wheat were sown, about 5 inches apart in drills 1.5 inches deep.



Acknowledgements:  
Butser Ancient Farm  
[www.butserancientfarm.co.uk](http://www.butserancientfarm.co.uk)  
Hengistbury Head Archaeology Trail, Peter Hawes and Mark Holloway 1994  
Martin Green