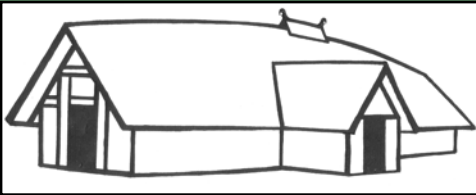


The Demands Of The Neolithic Houses At Durrington Walls: Time, Resources And Landscape.

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Introduction

Durrington Walls has been identified as the location for the homes of the builders of Stonehenge. In 2004-7 The Riverside Project unearthed the footprints of buildings which have given us an insight into the lives of the people who inhabited this part of modern day Wiltshire.

English Heritage commissioned the building of 5 reconstructed Neolithic houses based on the excavations at Durrington Walls as part of an external gallery at the new Stonehenge Visitor Centre. Prototypes of these buildings were constructed at Old Sarum in Wiltshire in the spring of 2013. As part of this project, all aspects of the harvesting and construction process were recorded and analysed with particular emphasis being given to the time and amount of materials that would have been required for such an undertaking.

It has been stated that Durrington walls ‘could have accommodated up to 1000 dwellings,’ (Parker Pearson et al 2013). To achieve this amount of dwellings within Durrington Walls would require a significant investment in time and resources. Could these dwellings have been all constructed at the same time? If so, these buildings would have needed renewal gradually over several years and they would have all had to have been rebuilt approximately three times in the lifetime of the site. Or, is the evidence found showing successive phases of rebuilding - given the proximity of the buildings found to each other?

The results aim to replicate these three scenarios in the maps to the right, they show how much land would have been required to provide the materials to construct the required number of buildings.

All of the area data is based on modern coppicing and farming yields. We have very little evidence of yields in the Neolithic, but chalk downland was not usually cultivated successfully until the advent of chemical fertilisers.

Every element of construction was recorded, including construction time.

On Site Construction (hrs)	
Weaving Walls	100
Knotting Wheat Straw	75.2
Thatching Roof	48
Constructing Roof Frame	256
Crushing Chalk	270.4
Daubing Walls	196.27
Laying Floor	50.3
Furniture Construction	99
TOTAL	1095.17



Parker Pearson, M et al, 2013. Stonehenge. In: Harding, A and Fokkens, Eds, *The Oxford Handbook of the European Bronze Age*. Oxford : Oxford University Press, 159- 178

The resources needed to construct 1000 houses at once:

- **32 Hectares of hazel coppice**
- **1182 Hectares of wheat straw**
- **10,000 tonnes of chalk**

This would also require:

- **1,095,170 man hours construction time**



The resources needed to construct on a 7 - 10 year coppice rotation:

- **6.4 hectares**
- **224 hectares of wheat straw**
- **2000 tonnes of chalk**

This would also require:

- **219,034 man hours construction time**

Based on 20% failure at 10 years = 200 houses. Then 20% of original number failing yearly there after – all houses replaced after 15 years.



The resources needed to construct 330 Houses rebuilt three times over the 45 year period:

- **10.656 Hectares of hazel coppice**
- **372.96 hectares of wheat straw**
- **3330 tonnes of chalk**

This would also require:

- **364,691.61 man hours Construction time**

