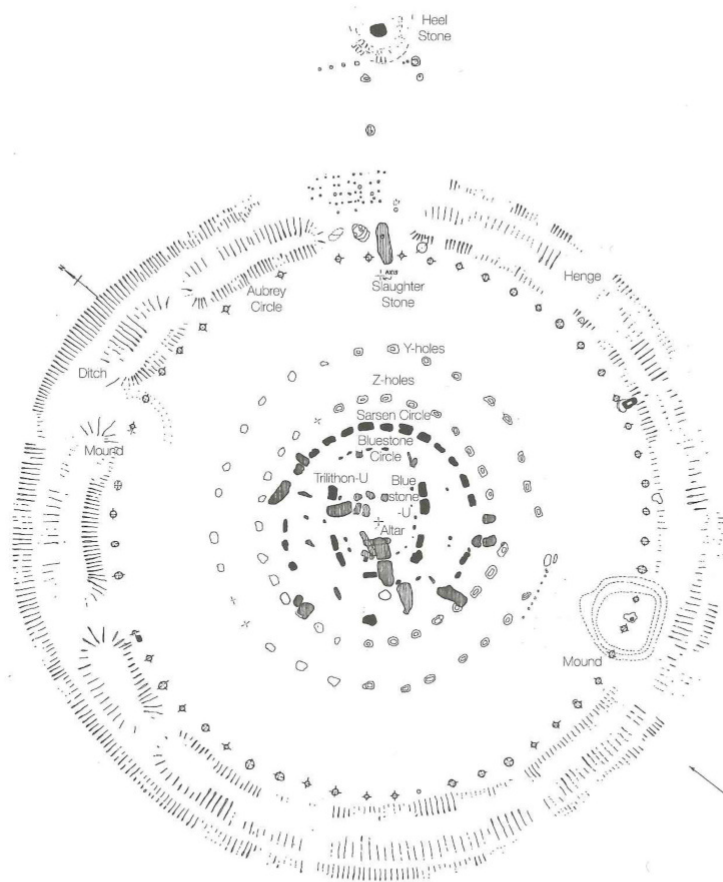


STONEHENGE



The 1973 Thom Survey of Stonehenge



Robin Heath

SARSENS & TRILITHONS

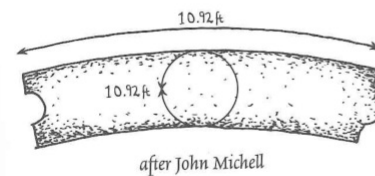
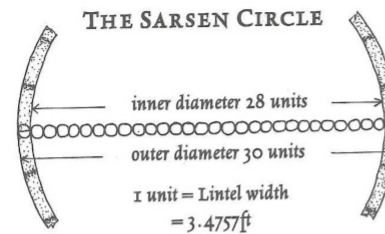
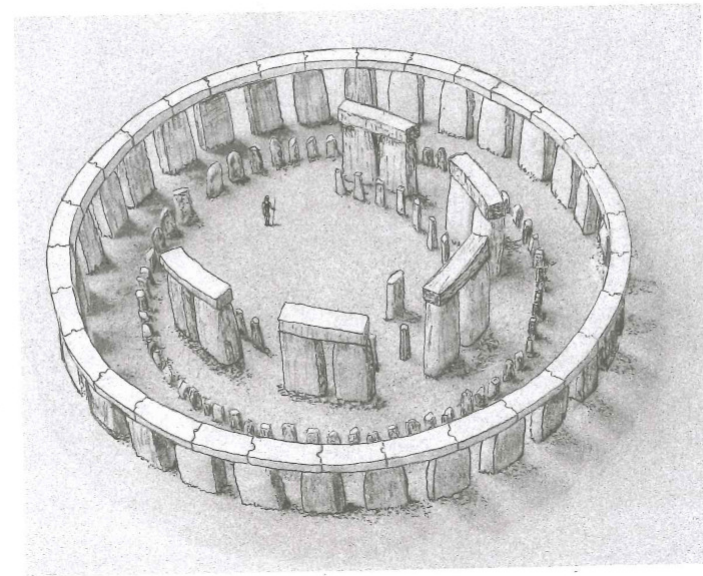
prehistoric monsters from a neolithic past

Around 2600BC the famous Sarsen Circle was constructed. Built on sloping ground, 30 uprights were crowned with a perfectly level circle of 30 raised sarsen stone lintels (*see opposite*). Five massive inner trilithons were also erected, of which three stand today. As the leviathan trilithon stones do not fit through the gaps in the Sarsen Circle, they were probably erected first. The sarsens were brought from Fyfield Down, 17 miles directly to the north of Stonehenge.

The Sarsen Circle was dressed on the stones' inner faces, and once supported a complete circle of thirty lintels about 15 feet above the ground. The trilithons were more finely dressed, yet curiously one of each pair of uprights was left rough. The five trilithons varied in height from 17 to 25 feet. The diameter of the Sarsen Circle through the centreline of the lintels is 100.8 feet. The elliptical trilithon 'horseshoe' measures 40 by 70 feet.

Sarsen is a sandstone several times harder than granite, and was dressed on site using sarsen mauls, weighing up to 63lb. Over 1800 of these have been excavated, many used as backfill after the upright stones had been placed into their positions.

Prior to this mammoth undertaking the earlier bluestone henge was dismantled and, centuries later, rearranged within the Sarsen Circle as an inner circle of 59 or 60 stones, about 75 feet in diameter, and a 39 foot diameter horseshoe of nineteen slender and polished bluestones, averaging 9 feet tall. Finally, the dressed 13 foot altar stone completed the edifice (*see plan on page 147*).



DIMENSIONS:

'Jewish' Sacred Rod = 3.4757ft
 = Polar Radius / 6,000,000

Outer diameter = 30 sacred rods
 = 104.27ft
 Outer circumference = 327.58ft
 Outer lintel length = 327.6 / 30
 = 10.92ft

Inner diameter = 28 sacred rods
 = 97.32ft
 Inner circumference = 305.74ft
 Inner lintel length = 10.19ft

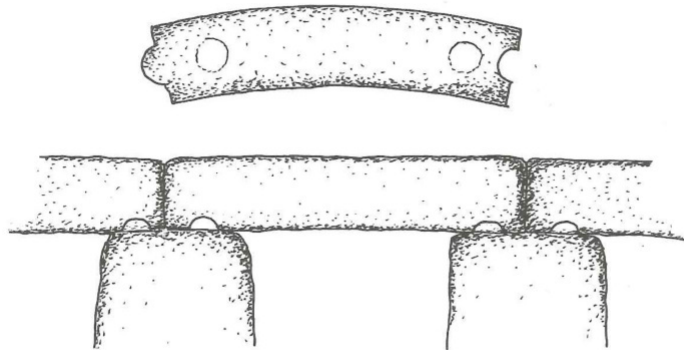
Lintel width = 3.4757ft
 = outer lintel length / π
 = 10.92 / π

WOODWORK IN STONE

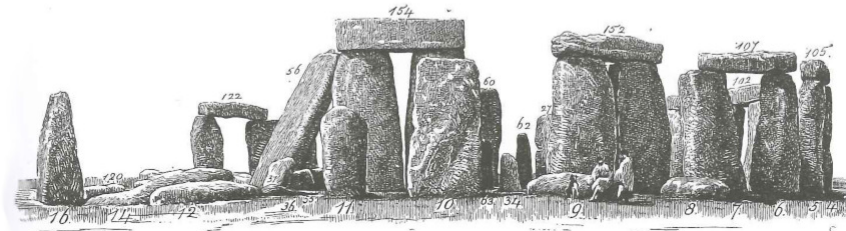
how to do joined up megaliths

In order to fix the lintels, they were locked together like pieces of a jigsaw, using tongues and grooves. In addition, each upright was dressed with two tenons which mated with corresponding mortises on the lintels (*see below*). The visitor may still observe the tenons on many sarsen uprights where the lintels have fallen. These jointing techniques derive from the wood joiner's craft and were also applied to bluestone lintels, thought to be part of a now demolished bluestone trilithon structure. A mortise hole on Stone 150 remains visible, while those on the underside of Stone 36, reburied following inspection, remain hidden underground.

The mighty trilithon uprights carried a large single tenon and their lintels were duly mortised. The tallest stone (56) still sports its tenon, like a jockey's cap thrown up as a prank, whilst its twin (Stone 55) and the curiously double-mortised lintel (Stone 156) have long since fallen.



2000 BC - An idealised view from the southeast showing local tribesmen, and the broken-off half-width sarsen. From *Stonehenge*, by Edgar Barclay, London 1895.



1900 AD - Stonehenge viewed from the same angle as above, but before restoration in the early 20th century, showing a silhouetted bluestone (62).



1900 AD - View from the west, also before restoration, showing the once perilously leaning trilithon upright (56). Also visible are tenons on stones 56 and 60.

PREDICTING ECLIPSES

who nodes how holds power

Anyone who has tried to make a model of how the Sun and Moon move around the sky will end up, most simply, with a circle of 28 markers around a central earth. Moving a 'Moon-Pole' one position per day and a 'Sun-Pole' once every 13 days, both anticlockwise, replicates the motions of the two luminaries around the Zodiac, and this can provide an accurate calendar.

As we have seen (pages 166-167), twice every year, for about 34 days, a full or new moon will cross the Sun's apparent path in the sky (the ecliptic) to produce eclipses. These two eclipse seasons, which are 173 days apart, move backwards around the calendar, taking 18.6 years to complete a revolution.

The two places where the path of the Moon crosses the path of the Sun are known as the *lunar nodes*, and by doubling the 28 markers to 56, as found in the Aubrey Circle (shown opposite), the 18.6 year period of the lunar nodes can also be incorporated. Conveniently, 18.6×3 is also almost 56, and eclipses may now be reliably predicted. Professor Sir Fred Hoyle was the first astronomer to comprehend this practical function for the 56 holes of the Aubrey Circle. A full or new moon within the shaded 'eclipse zone' predicts a lunar or solar eclipse. A lunar eclipse will always be visible at a given location if the Moon rises within the half hour before sunset.

Why not build one of these at home? Move the nodal markers clockwise three times a year, by one hole. The nodes will next coincide with the midsummer/midwinter axis in June 2020, and every 9 years and 110 days thereafter.

