

## Stonehenge

# Where the demons dwell

### A super-henge is found next door to Stonehenge

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And we thought the Rolling Stones were old

THOUSANDS gather on Salisbury Plain to celebrate the solstice at Stonehenge every summer, when the prehistoric standing stones align with the rising sun as they have done for over 4,500 years. Yet for ancient British revellers this most famous “henge”—a circular basin surrounded by a ditch and bank on its circumference—may well have played second fiddle to a supersized cousin next door.

Just 3km to the north-east lies Durrington Walls, a 500-metre-wide earthwork that today is merely a vague ridge surrounding a flat interior. Now a team led by Vincent Gaffney of the University of Bradford and Wolfgang Neubauer of the Ludwig Boltzmann Institute in Austria, working with colleagues from the University of Birmingham, have found that up to 200 giant stones once stood over this site, dwarfing its more famous neighbour.

The researchers are mapping the entire area around Stonehenge by driving their small tractors across the land towing two types of detectors. The first type measures local disturbances in the magnetic field, which would show up any anomalies from pits, ditches or monuments beneath the surface. The technique, which is called magnetometry, has a good record in archaeology, particularly as any fires once lit in pits alter the magnetic properties of the soil. Yet previous surveys never found anything of interest beneath the Durrington Walls perimeter.

It was the second method that turned up trumps. For this, the team used multi-channel ground-penetrating radar, which transmits radio waves beneath the surface and picks up any reflections from underground artefacts. This detected stones, some of them 4.5 metres

across, buried one metre beneath the outer bank of the super-henge. At this depth magnetometry would have missed them.

Though both types of detector are well-established, the new fieldwork was largely made possible by the miniaturisation of the technology. Bulky radar systems of old had to be set up meticulously by an archaeologist and could cover only a limited amount of ground before having to be fiddled with again. The system used in this work packed six radar antennae into an array small enough to be transported by a small tractor. It included a satellite-navigation system that automatically plotted the data points onto a map. It was slick enough for the team to scan 15 hectares around Durrington Walls at high resolution in just three days.

The giant stones revealed would have been placed around the same time as, or possibly even earlier than, those at Stonehenge, and once stood in a row (as illustrated above). They were knocked over by later generations and buried to make way for a renewed site. This helped to preserve about a third of them in their entirety.

The purpose of the structures around Stonehenge is still a mystery, and in the absence of written records may remain so. Durrington Walls may have begun as a spiritual or ritualistic place, later growing to include a permanent settlement. Floor remains suggest the super-henge came to host a dense village, perhaps, for a time, one of the largest in northern Europe.

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