***Feasts at Stonehenge and other monumental complexes drew people and animals from across Neolithic Britain***

Monumental complexes such as Stonehenge and Avebury represent some of the most famous prehistoric archaeological sites in the world. They often comprise sites of different character and function, with the Stonehenge complex having the stone circle of Stonehenge, a focus for funerary ritual, the wooden circle of Woodhenge and the henge enclosure of Durrington Walls, a centre for feasting and settlement.

These monumental complexes have been a focus for archaeological and antiquarian research for centuries. The origins of the people who engaged in ceremonies at (and very likely built) Stonehenge and other great Late Neolithic (c. 2800-2400BC) monumental complexes represents a long-standing enigma in research on British prehistory. Isotope analysis provides a suite of methods for identifying non-local individuals and exploring origins through sampling bone and teeth. However, human remains at these sites are almost all cremated and therefore unsuitable for some forms of isotope analysis. Consequently, other proxies for human movement must be utilised.

This study uses the bones and teeth of pigs, the prime feasting animal at these complexes. Tens of thousands have been recovered from Durrington Walls, providing a vital resource for reconstructing prehistoric lifeways. These are domestic pigs and therefore must have been brought by humans, thus potentially providing a good proxy for human movement. However, pigs are not considered well-suited to movement over distance and are commonplace in Late Neolithic Britain. Therefore, even if people came from far and wide, they might procure a pig in the vicinity of the henges to contribute to the feast, rather than going to the effort of bringing one that they themselves had raised. Pigs may therefore provide a weak proxy for human movement.

The research analyses the largest five-isotope system faunal dataset yet published in archaeology. A total of 131 animals were analysed from four Late Neolithic complexes in Wessex: Durrington Walls, West Kennet Palisade Enclosures, Mount Pleasant and Marden. Each isotope system provides different information about the origins of the animals. Strontium (87Sr/86Sr) provides a geological signal, oxygen (δ18O) a climatic signal and sulphur (δ34S) an indication of coastal proximity. Carbon (δ13C) and nitrogen (δ15N) isotope analysis provides dietary information and represents an important baseline from which to interpret the other proxies. The combination of these isotope systems means that non-local animals can be identified with greater confidence and likely origins can in some instances be posited.

Results were exceptionally wide-ranging in all of the provenancing isotope proxies. They are considered in the context of British origins, as there is no evidence for contact with continental Europe at this time. The strontium values encompassed the vast majority of biosphere variation that can be found in Britain from the youngest to oldest lithological zones. Oxygen values were suggestive of origins from the coastal west to the highland east and sulphur results indicated many animals were raised near the coast, with others having inland origins. No other British site of any period provides data as wide-ranging as for these Late Neolithic sites. On the basis of current mapping data, it is not possible to define origins with confidence, even when using multi-isotope proxies. Equifinality remains a hurdle to interpretation, as some areas may not be distinguishable. However, the scale of variation in all provenancing proxies provides convincing evidence for wide-ranging origins, with some perhaps coming from as far as Scotland. It is not only the famous megalithic centres like Stonehenge that were major foci. All four sites show long-distance connectivity, and there is no indication that they served different networks; all drew people and animals from across Britain for this feasting events.

These findings have major ramifications for how we understand Late Neolithic Britain. The monumental complexes of Wessex were not just power bases in the heartland of regional groups, at which feasting events acted to unify a disparate, yet broadly local populace, nor were they sites of reciprocal feasting, where alliances between neighbouring groups were forged and consolidated. These centres were lynchpins for a much greater scale of connectivity, involving disparate groups from across Britain. Results also suggest that prescribed contributions were required and that rules dictated that offered pigs must be raised by the feasting participants, accompanying them on their journey, rather than being acquired locally. The volume and scale of movement has not previously evidenced and it can be argued that the Late Neolithic was the first phase of pan-British connectivity. These long-distance networks were not only sustained by the movement of people but also of livestock. These results provide clear evidence for a great volume and scale of intercommunity mobility in Late Neolithic Britain, demonstrating a level of interaction and social complexity not previously appreciated.

**Original article:**

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