Unique Iron Age shield gives insight into prehistoric technology

May 23 2019

The unique find has given new insight into prehistoric technology. Credit: University of York

A unique bark shield, thought to have been constructed with wooden laths during the Iron Age, has provided new insight into the construction and design of prehistoric weaponry.

The only one of its kind ever found in Europe, the shield was found

south of Leicester on the Everards Meadows site, in what is believed to have been a livestock watering hole.

Following analysis of the construction of the shield by Michael Bamforth at the University of York, it became apparent that the shield had been carefully constructed with wooden laths to stiffen the structure, a wooden edging rim, and a woven boss to protect the wooden handle.

Although prior evidence has shown that prehistoric people used bark to make bowls and boxes, this is the first time researchers have seen the material used for a weapon of war.

Severe damage

The outside of the shield has been painted and scored in red chequerboard decoration. Radiocarbon dating has revealed that the shield was made between 395 and 255 BC.

The shield was severely damaged before being deposited in the ground, with some of the damage likely to have been caused by the pointed tips of spears. Further analysis is planned to help understand if this occurred in battle or as an act of ritual destruction.

Prehistoric technology

Michael Bamforth, from the University of York's Department of Archaeology, said: "This truly astonishing and unparalleled artefact has given us an insight into prehistoric technology that we could never have guessed at.

"Although we know that bark has many uses, including making boxes and containers it doesn't survive well in the archaeological record.

Initially we didn't think bark could be strong enough to use as a shield to defend against spears and swords and we wondered if it could be for ceremonial use.

"It was only through experimentation that we realised it could be tough enough to protect against blows from metal weapons. Although a bark shield is not as strong as one made from wood or metal, it would be much lighter allowing the user much more freedom of movement."

CT scanning

The shield was first discovered by archaeologists at the University of Leicester's Archaeoligical Services in 2015 at an Iron Age site within a farming landscape known to have been used and managed by Iron Age communities, with the Fosse Way Roman road running close by.

Many cutting-edge analytical techniques have been used to understand the construction of the object, including CT scanning and 3-D printing.

Dr. Rachel Crellin, Lecturer in later Prehistory at the University of Leicester, who assessed the evidence for impact damage, said: "The first time I saw the shield I was absolutely awed by it: the complex structure, the careful decorations, and the beautiful boss.

"I must admit I was initially sceptical about whether the shield would have functioned effectively, however the experimental work showed that the shield would have worked very effectively, and analysis of the surface of the object has identified evidence of use."

Craft practices

The shield has now been conserved by York Archaeological Trust and

will be deposited with the British Museum on behalf of Everards of Leicestershire, who funded and supported the project.

Dr. Julia Farley, Curator of British and European Iron Age Collections at the British Museum, said: "This is an absolutely phenomenal object, one of the most marvelous, internationally important finds that I've encountered in my career.

"Bark and basketry objects were probably commonplace in ancient Britain, but they seldom survive, so to be able to study this shield is a great privilege. It holds a rich store of information about Iron Age society and craft practices."

Provided by University of York