

# The Godney Canoe

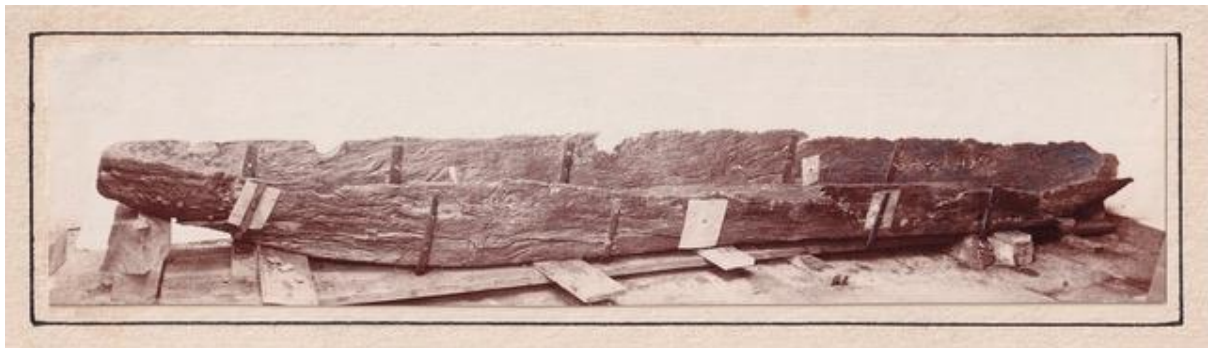
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The canoe was found 100 yards from Glastonbury Lake Village in 1892. It was discovered during ditching work, as one end of the canoe projected out into the ditch. It was found four feet below the level of the ground surface within the field and the two feet above the canoe were 'solid peat' (*The Graphic* magazine 5<sup>th</sup> Nov 1892, p.545).

The location and depth of burial have been taken as suggesting an Iron Age date, but this has never been tested scientifically. The radiocarbon dating sample taken from the sapwood of the canoe will hopefully provide the first evidence of its date of construction.

The Somerset HER follows the OS record in placing the find spot north of Crannel Farm but Bulleid shows that it was instead found further south, nearer the lake village (Bulleid 1924 map opp. p.14). The latter spot is more consistent with the '100 yards' of *The Graphic*, and therefore seems likely to be correct. The rhyne in which it was discovered fossilises the old course of the River Brue as it wound its way northwards to Godney and the Panborough Gap. The parish boundary still follows that route, and the proto Brue of the Iron Age probably followed a similar path, after winding past the eastern side of the lake village a short distance upstream.



*Figure 1 early photograph of the canoe*

## Condition of the canoe

The canoe is in a partial state of preservation, although the surviving elements represent virtually the entire original length and the original breadth over two thirds of the vessel. The sides are complete in places so the original depth of the craft can also be gauged.

The largest missing section is at one end, where the base and one side are absent over almost a metre, though a separate fragment of the base, just under 60cm long and 20cm wide, undoubtedly belongs somewhere in that section. The poor state of preservation at that end may well be because that was the part of the canoe that projected out into the rhyne and may have suffered from erosion and cutting during years of ditch maintenance before it was realised that it formed part of a canoe. This

is supported by Arthur Bulleid who wrote that 'one end was damaged by the spades of successive ditch diggers' (Bulleid 1906, 52). The earliest photos seem to show more wood on the incomplete side than survives today.

The less well preserved side of the canoe is separated from the base and the two sections do not join perfectly, suggesting that some pieces were lost when the break occurred. There are numerous cracks in the base and both sides of the canoe. The more complete end of the canoe is held together with a metal bolt, without which it would be in two pieces. The end piece is no longer joined to the end of the base of the canoe and has drifted slightly out of position so that it lies further towards the more complete side, to which it is attached than it would have originally been.

The canoe is stabilised with the assistance of metal brackets and bolts which penetrate the hull. The existence of other drilled holes through the hull may indicate the position of additional brackets, now no longer in use. At the well preserved end of the canoe a 15mm diameter hole has been drilled or augered through the prow/stern. It is uncertain if this was done during its active life, or if it was a modern hole to hold the two pieces of the prow/stern together. The large size suggests the former, perhaps for a mooring line or to hold a roundwood timber to help prevent a radial split spreading. This end of the vessel is broken in to by such a split.

Numerous knot holes exist in the base and sides of the vessel, where side branches were growing out of the main trunk. In some cases the remains of the branch wood is still *in situ*.



Figure 2 Looking along the canoe from the damaged end

### The character of the canoe

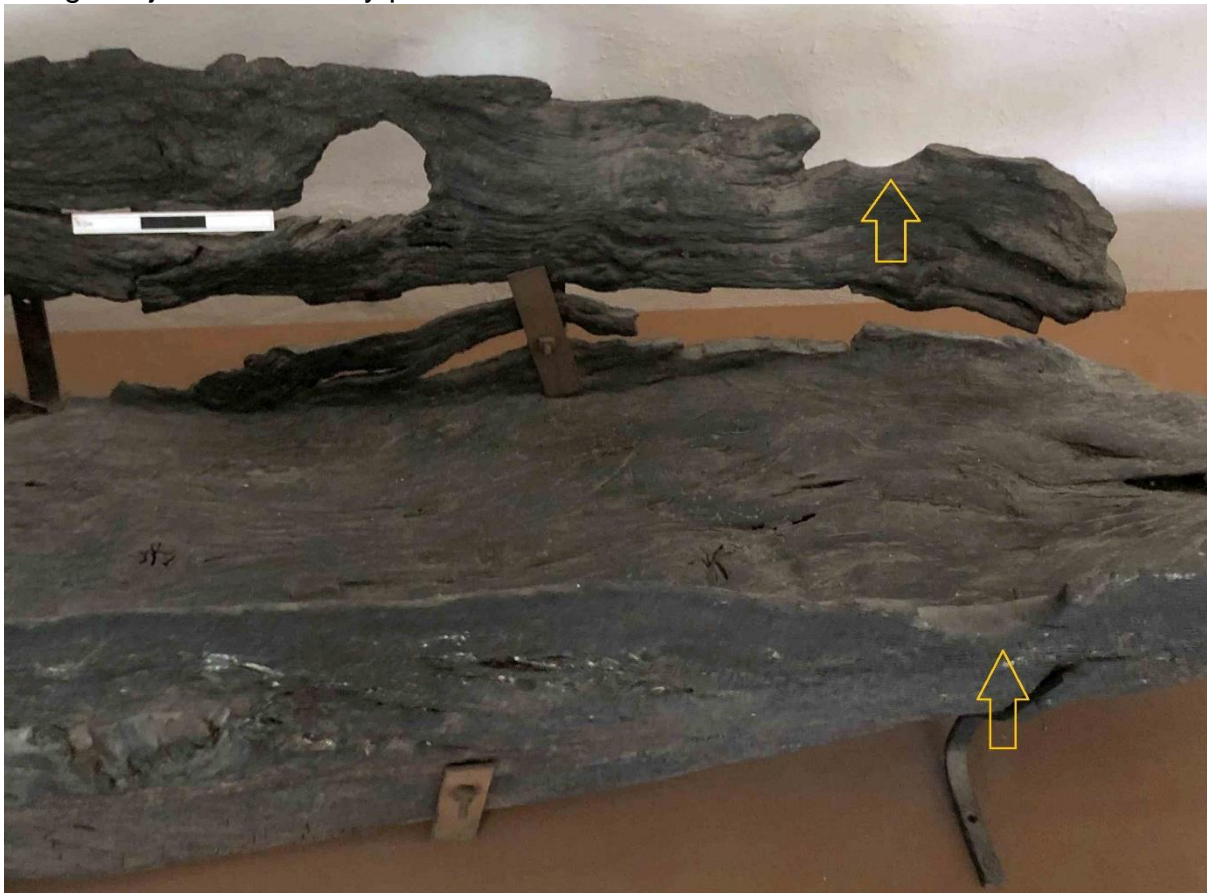
The canoe survives to a length of 5m, is 600mm wide and the original external height of the sides was probably about 300mm. Bulleid records that it was 18 foot long 'when complete' (Bulleid 1906, 52) which suggests that a section is missing from the damaged end, though *The Graphic* magazine recorded a length of 17 feet in 1892.



Figure 3 The hole at the complete end of the canoe

The canoe is flat bottomed and curves up towards the prow and stern over the last metre at either end. Both ends are carefully tapered towards a slim point suggesting that the canoe was double ended. That would be an advantage in narrow channels, where a change of direction could be achieved without the need to turn the vessel around.

The base of the canoe is up to 60mm thick, but the sides are much thinner, 25-30mm, and tapering to only 10mm at the top. The junction of the sides and base is almost a right angle. This has maximised the width of the base of the canoe but creates a weak point in the design. It is hardly surprising that the canoe has cracked along this junction in many places.



*Figure 4 The two carved indentations on the top of the sides (arrowed)*

Beginning roughly 40cm from the complete end of the canoe are a pair of carved and worn dishes in the top of the canoe side. They are shallow, only 4cm deep, and do not conform to the circumference of a circle, being instead more irregular in shape. In 1892 these features were deemed to hold paddles used as rudders (*'The Graphic'* magazine 5<sup>th</sup> Nov 1892, p.545). This would not be a necessary or practical use of such indentations. They may have been used to hold a lateral timber that joined the two sides of the canoe. Such a timber could have been shaped to fit into the indentations as a lap joint, which would require no other fixing. It could have helped to hold together the two side of the canoe and/or have been used as a seat or support.

A canoe of this size could probably accommodate up to a maximum of three paddlers. Reconstructions of the slightly larger Shapwick canoe have shown that it could accommodate four adults.

### The tree used in its construction

The character of the tree used in the construction of the canoe can be ascertained from the knotty character of the wood and the annual ring count where the rings are visible. The canoe was made from a mature oak tree, over 150 years old. The base of the tree was at the incomplete end of the canoe as demonstrated in the direction of the side branches. The numerous and large side branches suggest that the tree was not growing in dense woodland, but instead in an environment where it branched early and often. That could be in a hedgerow, as a standard in a coppiced woodland or as an isolated tree within a pasture or arable field.



*Figure 5 Knothole with remains of the side branch wood still in situ. The spiralling of the grain is visible.*

The grain of the wood spirals slightly, which was probably caused by the influence of a prevailing wind. Again, this fits with an isolated tree rather than one in dense woodland. The builders of the canoe did not split the trunk to make the canoe, instead utilising its whole circumference. The canoe would have been carved out of the trunk using axes and adzes. No clear toolmarks on the canoe, though some short indentations may represent the residual evidence of axe blows that were not entirely removed in the shaping of the sides.

At the complete end of the canoe only half the trunk is represented, but by the middle of the canoe the base uses the other half of the trunk and a residual stretch of sapwood survives over a distance of about 1m on the external corner of the base and side, on the more complete side of the canoe. The existence of the



*Figure 6 Splitting along the rays at the more complete end. The centre of the tree is at the bottom.*

sapwood, that is very perishable, suggests that the builders were pushing the available dimensions of the tree.

The large number of branches on the tree trunk selected by the builders had several disadvantages. They would make it a lot harder to cut out the desired shape of the vessel and get a smooth finish. In addition, they create areas of weakness where the side branch wood could split or even pop out, especially in the very thin sides. Many of the knots now appear as holes in the sides for that reason.



*Figure 7 Sapwood surviving on the bottom edge of the canoe, lighter in colour and more shrunken than the heartwood. The radiocarbon sample was taken from this area so that the last years of the tree's growth were being dated*

### **Comparison with other Somerset canoes**

Four other dug out canoes are known to have been discovered in the Brue Valley (Bulleid 1906, Gray 1946, Stradling 1849) and two more from Kings Sedgemoor, south of the Polden hills. All of these appear to have been oak apart from a beech canoe found in the foundations of Glastonbury Lake Village.

Unfortunately, only the Shapwick canoe, discovered in 1906, still survives and has a detailed record of its construction (Bulleid 1906). That canoe, which is radiocarbon dated to the Iron Age (760-60BC at 95% confidence, Somerset HER 10021), has similarities and differences with the Godney example. Its is also made from a single oak trunk, is flat bottomed and has thin sides and is double ended. The differences are that it is slightly longer (6.27m) and wider (68cm) and that its ends are wide and punt like instead of coming to a point. The tree used was also straighter and more knot free and the junctions of the sides and base were thicker and more robust. The Shapwick canoe has two roundwood pieces inserted vertically through one end, for an unknown purpose.

## References

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## ADDITIONAL NOTES

Richard Brunning supported the Glastonbury Antiquarian Society application to the SANHS Maltwood Fund to have the Godney Canoe dated. Samples showed the canoe to be Anglo-Saxon in date (6<sup>th</sup>/7<sup>th</sup> century) and is the only example of a log boat of this date in Somerset.