

Fig. 1—Fish basket preserved in peat matrix. (John Sunderland)

CATCH OF THE DAY at Clowanstown, Co. Meath

Maria FitzGerald, former NRA archaeologist, describes late Mesolithic fish baskets from Clowanstown on the M3 and what they reveal about the development of basketry technology in Ireland.

A series of well-preserved wooden baskets were discovered at Clowanstown, Co. Meath, c. 4km north of Dunshaughlin, a site excavated as part of the advance archaeological investigations for the M3 Clonee to North of Kells motorway scheme. Archaeologist Matt Mossop, who carried out the excavation on behalf of Archaeological Consultancy Services Ltd, has interpreted the earliest structures on site as the remains of a late Mesolithic mooring/fishing platform and the baskets as the remains of conical fish baskets. Other finds from the late Mesolithic period included butt-trimmed Bann flakes (leaf-shaped stone implements characteristic of this period). Five upstanding Neolithic burnt mounds testified to later activity on the site. These were identified during testing in 2004 and were what first brought this location to the attention of archaeologists.

The site was on the edge of a raised bog but at the end of the last ice age this would have been a small lake. Coring and analysis of the peat by environmental specialist Dr Ben Geary, Birmingham University, indicated that sediments began to

accumulate and to fill in the lake prior to the development of raised bog on the site.

During the Mesolithic period (7500–4000 BC) people lived by fishing, hunting and foraging. Clowanstown would have been an ideal location for these activities, as the lake would have provided fish and waterfowl while plants and animals would have been available in the surrounding woodlands. Evidence for the presence of these early settlers is often very elusive as wet areas gradually become concealed by bog. In addition, the structures and objects of their everyday life were mainly of organic materials, which are generally perishable and rarely survive to the present day.

In this context, a beautifully preserved basket from such an early level on the site was an extraordinary and unexpected discovery. The first basket was found in a flattened state embedded in the peat, and appeared to be very delicate and finely made (Fig. 1). It measured 1,120mm long by 400mm in diameter at the wider end and was made using a twined technique (see below), in which pairs of transverse wefts

(the horizontal elements of any woven item) were worked together to bind the longitudinal strands, or warps, in place. The wider end of the basket was finished with a double row of strands, presumably to provide a firm edge (Fig. 2). The basket tapered from a wide to a narrow pointed end; it was probably conical originally but had become flattened over time. Figure 3 shows a Bamba tribesman from Mali in West Africa with a similar fishing basket. Such baskets are still used by thousands of Bamba tribesmen during their sacred ritual fishing festival held at Antigo Lake in Mali each year. The basket from Clowanstown is relatively small and could have been used to scoop fish out of the lake by hand; alternatively, it could have been placed within a weir. Some large stones appear to have been used as weights to hold the basket in position, which may suggest that it was placed in the lake when not in use.

This first basket from Clowanstown has returned a radiocarbon date of 5210–4970 BC. Additional baskets of the same form were subsequently discovered at similar levels. In total, the final basket assemblage

Fig. 2 (right)—Double-twined edge of the same basket. (John Sunderland)

Fig. 3 (middle right)—Bamba tribesman from Mali with fish basket. (Alain Buu)

Fig. 4 (below right)—A second fish basket. (John Sunderland)

from Clowanstown comprises four largely intact baskets and multiple small fragments and strands (Figs 4–6). The baskets were all made from small twigs measuring 2–8mm in diameter, which, given their delicate and flexible appearance on site, initially suggested that they might have been made from the locally available rush or *Juncus*. Environmental specialist Susan Lyons, Headland Archaeology Ltd, examined the elements of the baskets, however, and found that the twigs were of alder, birch and Rosaceae. These are common to marginal woodlands and all were identified from the pollen cores from the Clowanstown site, indicating that wood from the immediate environment was selected and used for the baskets. All the shoots were aged between one and two years, thus providing flexible and durable materials suitable for fish baskets.

Prehistoric baskets from Ireland

The Clowanstown baskets can be added to a small assemblage of possible prehistoric baskets from Ireland described by Joseph Raftery in 1970. These comprise a fragment of a basketry bag from Aghintemple, Co. Longford, which was discovered wrapped around a polished stone axehead, suggesting a Neolithic date. Two other coiled discs of basketry, interpreted as the remains of a bag, were recovered from a bog at Twyford, Co. Westmeath, and eight circular mats were found inside a round-bottomed wooden bowl at Timoney, Co. Tipperary.

A more recently discovered fragment of basket from Carrigdirty Rock, Co. Limerick, in the Shannon estuary returned a radiocarbon date of 3875–3535 BC. Like the Clowanstown baskets, young alder shoots were used to make the Carrigdirty basket. A series of wooden fish traps and a basket fragment were also recently discovered by archaeologist Melanie McQuade, Margaret





Fig. 5 (top left)—Main fragment of another fish basket. (John Sunderland)

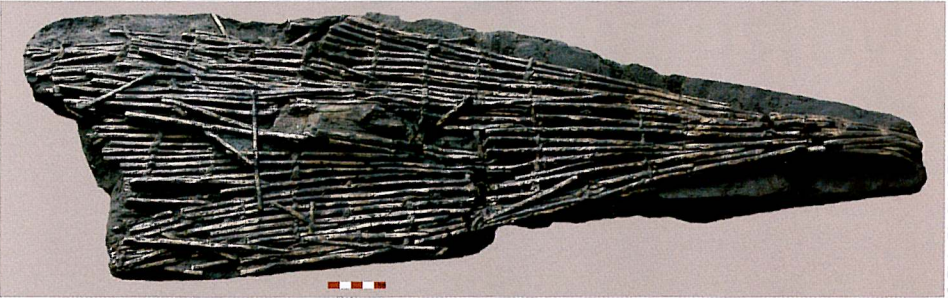


Fig. 6 (middle left)—Fish basket. (John Sunderland)

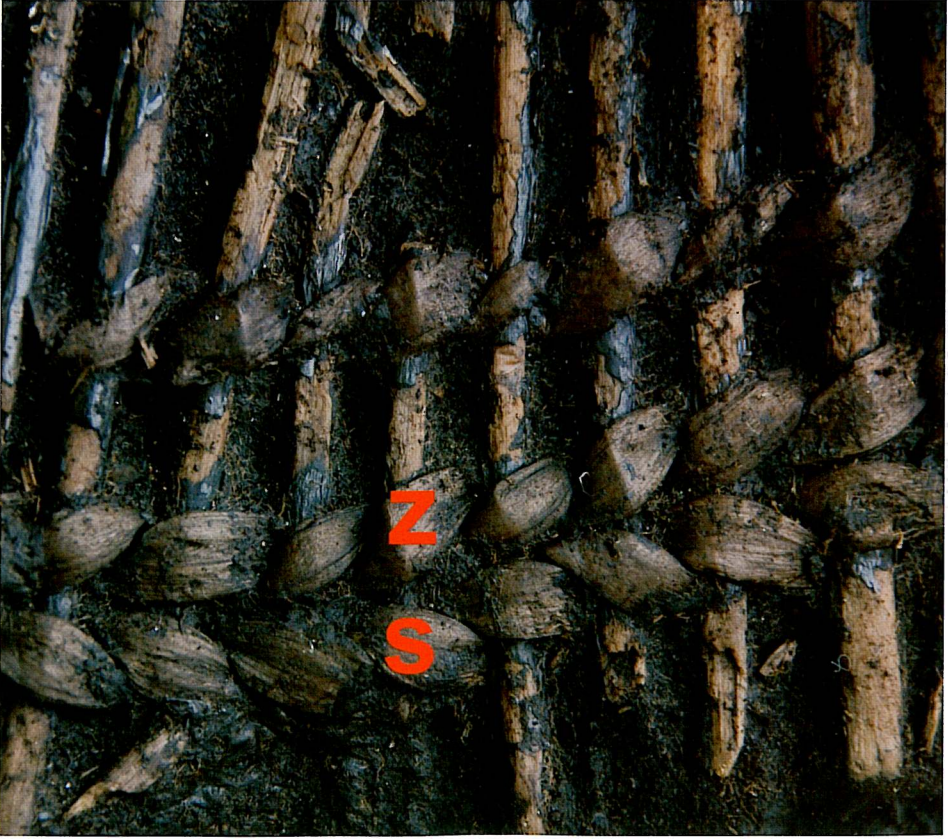


Fig. 7 (below left)—Detail of one of the baskets, showing Z- and S-twisted wefts. (John Sunderland)

Gowen & Co. Ltd (MGL), at very deep levels near the North Wall Quay, Dublin. This fishing station was dated to the late Mesolithic period. The small fragment (600mm by 300mm) was made using rods averaging 18mm in diameter bound by transverse strands, and the basket was radiocarbon-dated to 5930–5740 BC.

Basketry technique

Basketry is one of the oldest crafts and the term is generally applied to woven three-dimensional items. In prehistoric Europe basketry methods have been used to make items of clothing such as hats, as well as matting, fish baskets and other containers. In structure baskets are closely related to textiles. In contrast to textiles, however, baskets are generally made from unspun fibres of local vegetation. Both were made by interlacing strands of thread by hand; the main difference between the crafts came at a later stage, when special textile fibres such as flax or wool were grown and collected. In baskets, the short lengths of the materials and their relative rigidity give rise to a self-shaped product; the stiffness of the materials makes the use of a loom unnecessary as the elements naturally remain in position during construction.

Three main techniques—coiling, twining and plaiting or interlacing—were important in prehistoric basketry. Until the recent finds from Clowanstown and North Wall Quay, all known prehistoric Irish baskets were made by coiling. With this technique the basket is made by sewing a stationary coiled horizontal element or set of elements, and work always begins at the base. Coiled basketry is thought to be the earliest and most important form of basketry; its structure, however, unlike that of twined and plaited basketry, is considered to have little affinity with weaving as the

coils are sewn together rather than interlaced with the sewing strip.

In contrast, the recently discovered baskets from Clowanstown and North Wall Quay were made with the twining technique. The Clowanstown baskets were made by open twining, with predominantly S-twisted wefts but occasional Z-twisted wefts, where the central bar of the letter S or Z denotes the direction of twist (Fig. 7). Twined baskets are assembled by the passing of pairs of wefts around fixed vertical elements called warps. The Clowanstown baskets are classified as open-twined baskets as the weft rows are placed at intervals along the warps (Fig. 8). This technique is more comparable to true weaving as two sets of elements are interlaced, but these twined baskets pre-date the earliest extant finds of woven fabrics by several thousand years. Their appearance indicates that experimentation with interlacing systems was occurring in Ireland from the late Mesolithic period and once again reminds us that our understanding of cultural and technological development can be revolutionised by new discoveries.

Recording and conserving the baskets

Owing to the importance and fragility of the Clowanstown assemblage, the baskets were extensively recorded in advance of conservation. They have been photographed by John Sunderland and drawn by Pawel Wolff and Joanna Kurkowicz (Fig. 9). In addition, as part of the recording process Liverpool Conservation



Fig. 8 (below left)—Detail of basket showing intervals between transverse wefts.

Fig. 9 (above)—Pawel and Joanna illustrating the baskets.

Fig. 10 (below right)—Laser scan of basket.

Technologies used non-contact laser scanning to produce extremely accurate (to $\pm 0.1\text{mm}$) 3D digital records of each of the baskets. Through the resulting computer models the fish traps have been preserved and archived for the future and can now be studied without any risk to the artefacts themselves (Fig. 10).

This large-scale and sensitive conservation project is being carried out by Arch Con Labs, MGL. Brigid Gallagher, assisted by Hega Hollund, carried out the initial lifting and micro-excavation of the baskets. Conservation of objects as delicate and rare as these requires careful research. The initial experimentation was carried out by Brigid and is now being further developed and implemented by Karina Morton for MGL in consultation with Roly Reid of the National Museum of Ireland

(NMI). The baskets are being conserved in the peat stratum on which they were discovered, which will provide support as well as a context for the objects when they are eventually displayed. It is anticipated that the baskets will be freeze-dried by the NMI in the autumn and, pending the success of the project, they will be stable for future exhibition and research. ■

Background image: Illustration of basket (E3064:011:010:001) by Pawel Wolff and Joanna Kurkowicz.

