2. Neolithic Monanny, County Monaghan

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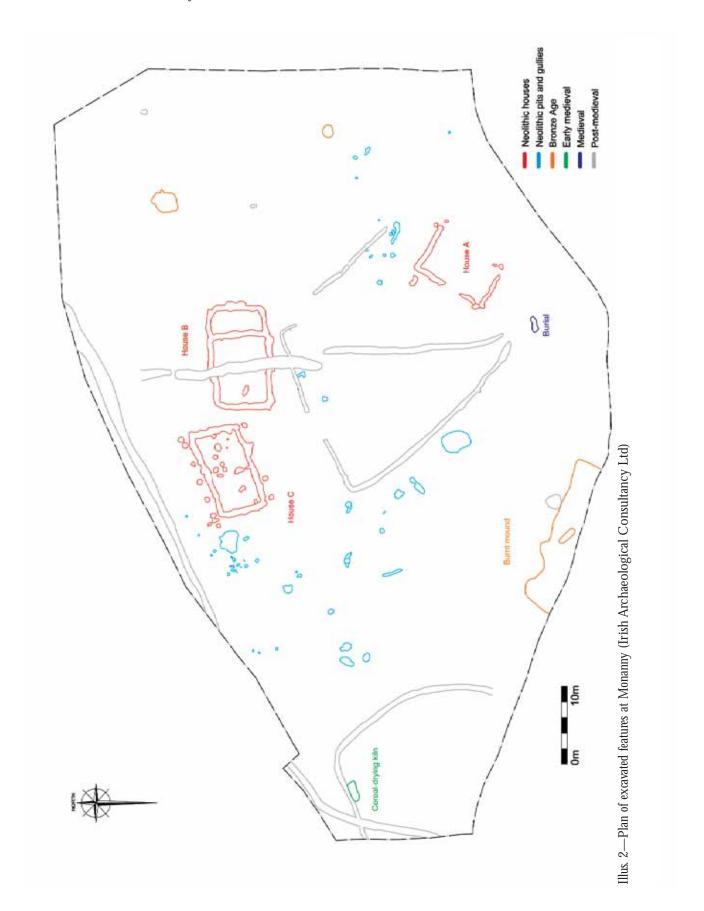


Illus. 1—Location map of Monanny, Co. Monaghan (based on the Ordnance Survey Ireland map)

The construction of the N2 Carrickmacross Bypass provided a great opportunity to investigate the previously unknown archaeological resource of this part of County Monaghan. Nestled between a low drumlin to the north and a small river and large rocky outcrop to the south; a Neolithic settlement site remained hidden in Monanny townland for nearly 6,000 years (Illus. 1).

The surrounding topography provided a sheltered location in the landscape, and this was evidently a very attractive spot for early settlers. In addition to this, the adjacent Longfield River is rich in salmon, trout and eel, and there is every reason to expect that these fish species have occupied this stretch of river for many thousands of years.

The archaeological excavation of the site was undertaken in the summer of 2003 by Irish Archaeological Consultancy Ltd on behalf of Monaghan County Council and the National Roads Authority (NGR 284280, 305240; height 37.5 m OD; excavation licence no. 03E0888). A number of distinct phases of activity were identified at Monanny: three Neolithic houses and associated pits and hearths; Bronze Age activity in the form of a burnt mound and pits; an early medieval cereal-drying kiln; a medieval burial; and post-medieval agricultural features (Illus. 2 & 3). This paper concentrates on the Neolithic phase of activity.



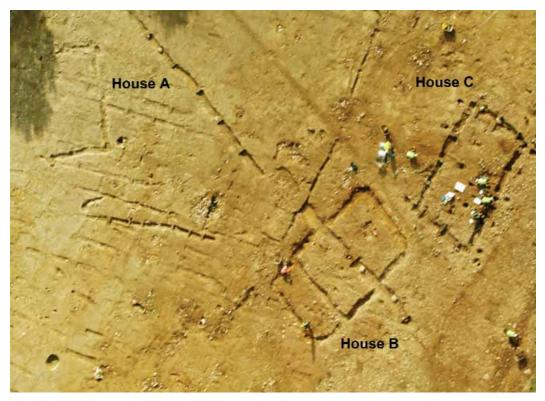


Illus. 3—Aerial view of Monanny, looking south-west (Studio Lab)

The first farmers in County Monaghan

There is evidence throughout County Monaghan of the religious/social centres of the Neolithic population in the form of megalithic tombs. Monanny has provided the first evidence of where the Neolithic people in this part of the country actually settled and set up home. These Neolithic people were Ireland's first farmers. The settlers would have cleared the forest at this meander of the Longfield River, built their homes from the plentiful supply of wood and farmed the land along the river's edge, growing wheat and barley and possibly raising cattle, pig and sheep. It is possible that fish played a part in their diet, as the adjacent river would have provided a plentiful supply, especially in late summer/autumn.

The focus of Neolithic activity at Monanny was centred on three rectangular buildings, interpreted here as houses (Houses A, B and C; Illus. 4). These have been interpreted as houses on the basis of the large quantity of occupation debris (broken pottery, cooking waste) associated with them and the fact that Houses B and C had well-defined internal hearths. These houses would have been constructed using posts and planks, with perhaps thatch or timber roofing. All of the houses returned radiocarbon dates of c. 4000 BC (see Appendix 1 for details).



Illus. 4—Aerial view of Houses A, B and C (Studio Lab)

House A

House A was the smallest of the three houses and was situated close to the edge of the river to the south of the site. It was defined by a shallow, subrectangular foundation trench measuring c. 10 m north-east-south-west by 6–7 m. The internal floor area was 54 m². No trace of the southern wall survived, and a possible entrance threshold was identified in the north-west corner. A number of stone-packed post-holes were associated with the southern limits of the eastern and western walls, with some evidence of support posts cut into the packing material. It was clear that the main load-bearing posts were at the four corners of the building, while the foundation trench would have supported upright planks. No internal features were present.

Excavation revealed that the house walls were mostly based on a bed of redeposited natural subsoil, which was evident along the length of the foundation trench. Planks and posts would have been placed on this, with packing material placed around the structural elements. The position of posts was revealed by circular voids in this packing material. These voids were created by the removal of the structural posts and planks and were eventually filled by occupation debris after the probable deliberate abandonment of the house. This debris consisted of charcoal-rich clays with abundant amounts of Early Neolithic pottery.

The western wall of House A seemed to have been burnt down, which probably led to the abandonment of the house, as there was no evidence of rebuilding. This was revealed by a distinct level of burning and an *in situ* burnt timber in the foundation trench. The burnt timber has been identified as oak, which is a common building material for Neolithic

houses in Ireland. It is likely that this wood type was chosen as the main construction material for all three houses. The burning of the west wall was probably accidental fire damage rather than the deliberate destruction of the house.

House B

House B was the largest house at Monanny. It was rectangular and measured c. 13.5 m east—west by 8 m externally. The internal floor area was 78 m². The foundation trench varied in depth from 0.2 m to 0.3 m and was generally U-shaped in profile. The house was divided internally by a partition wall forming two rooms (Rooms 1 & 2).

House B was of post-and-plank construction. It appeared to have been deliberately abandoned in the final stages of its life, as evidenced by the complete removal of the posts and planks. The process of removing the structural elements disturbed much of the packing fills in the foundation trench. However, evidence of the location of the posts and planks survived as voids in distinct packing or base material throughout most of the foundation trench. The largest post-holes were central to the north and south walls of the house and may have been the main roof supports (there were no significant internal or external structural features). Substantial post-holes were also evident at the corners and at the junction between the inner, dividing wall and the north and south walls. The foundation trench would have supported the plank walls of the house, with subsidiary posts for extra support where necessary. The subsidiary posts were evident in occasional post-holes at the base of the foundation trench. A lower stone-packed deposit was noted throughout most of the foundation trench and would have acted as a firm footing for the posts and planks. The



Illus. 5—Threshold of House B, during excavation (Irish Archaeological Consultancy Ltd)



Illus. 6—Stone axehead from House B (Claire Phelan)

stone-packed deposit varied in form from thin lenses of small stone to large clusters of rough stone packing.

A burnt timber (oak) was uncovered within the southern wall of the building. This may be the result of limited fire damage during the lifespan of the house, as this is the only point where evidence of burning is present. This part of the wall was probably replaced or mended, as this burnt timber was embedded in the lower levels of the foundation trench and evidently belonged to an early phase of the life of the house.

The entrance to the house was defined by an impressive stone-based threshold in the north-west corner (Illus. 5). This consisted of a series of closely packed flat stones. A posthole adjacent to, and west of, the threshold may have acted as a door jamb.

Access to the larger of the two rooms (Room 1) defined by the internal wall division would have been via the entrance. A hearth central to the western end of the room was defined by a distinct area of burning. This room would possibly have acted as the main

living area. The smaller room (Room 2) may have acted as a storage space for grain or other supplies or as an animal stall when needed. An entrance to this room was tentatively identified at the north-west corner, where the foundation trench was significantly shallower. It is possible, however, that the internal wall was removed during the lifespan of the house to create one large living area. The archaeological evidence pointed to the complete removal of this wall (perhaps it was dug out), with the trench quickly backfilled with occupational debris. This debris produced large quantities of broken pottery sherds, lithics and plant remains.

A polished stone axehead was also recovered from House B (Illus. 6). It was made from porphyritic dolerite. Interestingly, the axehead appeared to have been ground down from a larger/earlier axehead. The axehead was smashed, perhaps deliberately, by repeated blows to its cutting edge (B Leon, pers. comm.) and was deposited in an upright position (blade down) in the packing material of a post support, at the junction of the south wall and the internal wall. It may have been placed there as part of a ritual process during the construction of the house.

House C

House C was the most impressive of the three houses (Illus. 7), as it was sturdier and more architecturally impressive than Houses A and B. The north and south walls would have been flanked by large posts on the exterior of the building, and internal posts would have helped to support the roof. It measured c. 12 m east—west by 7 m (8.5 m including the external



Illus. 7—House C during excavation, looking south-west (Irish Archaeological Consultancy Ltd)



Illus. 8—Burnt post (in situ) in south wall of House C (Irish Archaeological Consultancy Ltd)

post-holes). The internal floor area was 52 m^2 . The foundation trench was 0.16-0.37 m deep and, in general, had an irregular profile throughout.

There was extensive burning throughout the house. The structural elements (posts and planks) were almost completely burnt or charred through to the base of the foundation trench (Illus. 8). Because House C was burnt *in situ* it offers unusually good evidence of the construction methods of the Neolithic builders. The posts and planks, which have been identified as oak, were held in place in the foundation trench by deposits of packing material incorporating large stones, which were in plentiful supply around the site. The stones were primarily packed on the outer edge of the upright timbers, and presumably this was intended to counteract the outward thrust of the roof weight on the walls. Large posts were situated at the corners, with the walls constructed of planks and occasional supporting (subsidiary) posts. The subsidiary post-holes were spaced evenly throughout the foundation trench at intervals of approximately 0.5–0.75 m.

House C had seven deep post-holes outside the foundation trench on its northern side (Illus. 9). The post-holes were 'doubled up' at the north-west and north-east corners of the building. The main post-holes (c. 0.5 m deep) were 0.2–0.5 m from the outer edge of the trench and were quite evenly spaced, 1.5–1.7 m apart. Three or four of these post-holes tapered to points at the base, suggesting that the posts had been sharpened and driven into the ground. Three post-holes with limited evidence of burning were evident along the outer edge of the southern wall of the building, also set 0.2–0.5 m from the wall. Two were at the southern corners.



Illus. 9—External post-holes of House C, during excavation (Irish Archaeological Consultancy Ltd)

As these post-holes were quite substantial in relation to the foundation trench (in particular the northern post-holes), it is possible that they supplemented the load-bearing post-holes within the corners of the foundation trench. In addition to this they may have carried much of the roof weight or an overhanging eave.

The entrance threshold was identified at the southern end of the eastern wall. The foundation trench was distinctly narrower and shallower at this point, and there was no evidence of burning. Two post-holes immediately inside the house at this point may have been part of a doorframe or small entrance lobby about 2 m wide.

Unlike Houses A and B, there was clear evidence of internal supports in this building. A number of fairly evenly spaced post-holes were uncovered. A well-defined hearth was also identified central to, and close to, the north wall on what may have been the original floor surface of the house.

A possible 'working area' was identified immediately north-west of House C. This area consisted of a number of small patches of burning and a quantity of stake-holes and pits. The main area of burning was central to a cluster of stake-holes, which may have defined the supports for a spit over a fire. In addition to this, a small number of isolated, scattered pits were uncovered throughout the site.

One of the most striking aspects of House C was the evidence of extensive burning. The extent of the burning of the structural elements was so great that it is tempting to view this as evidence of a deliberate act of destruction by fire. This phenomenon has been identified on numerous sites in central and eastern Europe (Stevanovic 1997). The near-

complete burning of House C at Monanny could not have resulted accidentally. Experiments have shown that a wooden structure cannot be completely burnt without the use of additional fuel and good draught (Gordon 1953; Bankoff & Winter 1979). It is probable, therefore, that the burning of House C was a deliberate act. Complete burning would require control and purpose, perhaps as part of a ritual act. It has been suggested that the ritual burning of a house could have been carried out in response to the death of a leading member of the family, or simply in response to the end of its usefulness (Cooney 2000). In this latter scenario the house also has 'died'. Bailey (1996, 148) suggests that a house must be treated as having multiple functions and meanings. He states that houses have biographies: that they are conceived, born, live and die, are inhumed or cremated, and are remembered after death.

Artefacts

Large quantities of Early Neolithic pottery sherds were recovered from the three houses. The pottery was mostly retrieved from charcoal-rich occupation deposits. In some cases these deposits had made their way into the foundation trenches after the removal of the structural timbers, but they were also found within the primary construction (packing) material. In addition, large quantities were recovered from the burnt horizons of House C. The pottery assemblage is highly significant and consisted of 978 sherds of Neolithic pottery, representing at least 82 and probably more than 143 vessels. These include plain carinated bowls, uncarinated vessels, a short–necked pot and small cups. Outside of the complex of Lough Gur, Co. Limerick, and the prolific Neolithic sites of north-east Ulster, this is the largest assemblage of plain carinated bowls in Ireland (E Grogan & H Roche, pers. comm.).

A total of 47 flint artefacts was recovered, mostly consisting of flakes, a small number of unworked pieces, a quantity of modified tools and debitage (waste fragments) resulting from the process of tool production. A leaf-shaped arrowhead, a scraper and some form of cutting tool were recovered from House B, and a fine knife was recovered from House C. Half of the modified flint assemblage from Monanny was burnt, most of which was recovered from House B. There was a distinct lack of flint cores (the primary material from which flint tools are made), which is particularly unusual in Early Neolithic flint assemblages (E Nelis, pers. comm.). It is possible that at Monanny only the finer/final stages of flint tool production took place on-site and that the primary flint working took place elsewhere. This is in contrast to most Irish Early Neolithic house sites, where the material seems to have arrived in its raw state to be worked into cores and then later reduced to create tools. Overall, the flint assemblage was small, certainly in comparison to the large quantity of pottery found on the site. This was probably because the people living at Monanny had limited access to flint.

In addition to the flint artefacts, there were artefacts consisting of mudstone and shale cutting tools. In the Irish Neolithic, stone tools were predominantly made from flint; however, other, readily available stone materials were used on sites where the flint resource was limited, as at Monanny. In addition to the cutting tools, hammer/rubbing stones/pounders were found. A serpentine (stone) bead was also found in the burnt horizon of House C.

Environmental evidence

The houses at Monanny were mostly constructed of oak. Oak has great strength and durability and was commonly used for structural timbers during the Neolithic. The oak probably grew in mixed woodlands adjacent to Monanny.

A small quantity of plant remains, hazelnut shells and unidentifiable burnt mammal bone was recovered from the soils sampled from the site. Emmer wheat (*Triticum dicoccum*) was recovered from Houses A and B. Naked barley (*Hordeum vulgare* var. *nudum*) was recovered from House C. Both grain types have been recorded from various Neolithic occupation sites throughout Ireland (Monk 1986).

Dating

On the basis of the radiocarbon dates for the three houses (see Appendix 1) it is entirely possible that Houses A, B and C were contemporary with each other. However, although the pottery from Houses A and C was very similar, there was a higher percentage of more extravagant shoulder pottery sherds from House B. This suggests a slightly later date for this house, or, alternatively, it may simply indicate a more subtle preference in a contemporaneous community (E Grogan & H Roche, pers. comm.).

The dates for the houses at Monanny were obtained from oak charcoal. It is intended to obtain further dates from burnt mammal bone and carbonised seeds to supplement these, as the oak dates may be subject to the 'old wood effect' (i.e. the age of the wood sample may be greater than the age of the archaeological layer or building in which it was found).

Conclusion

The bypass of Carrickmacross provided a unique transect through time in this area. The site at Monanny adds significantly to our knowledge of Neolithic habitation sites in Ireland and is a major archaeological find for County Monaghan. There is every reason to expect that more Neolithic habitation sites like this lie hidden under the rich, rolling agricultural lands around Monanny.

Acknowledgements

First and foremost, the writer thanks the excellent archaeological excavation team. Thanks to Dr Eoin Grogan and Helen Roche for the pottery identifications, help and observations. Thanks to Dr Eiméar Nelis for the lithic analysis, Susan Lyons (Headland Archaeology Ltd) for the plant remains analysis and Ellen OCarroll for charcoal and wood identifications, and also to Barbara Leon (Stone Axe Project), Dr Alison Sheridan, Prof. Gabriel Cooney, Cathy Gibbons and Jessica Smyth. Thanks also to Claire Phelan for her work on the illustrations and to all the staff at Irish Archaeological Consultancy Ltd. The project archaeologist on the N2 Carrickmacross Bypass was Niall Roycroft, Meath County Council National Roads Design Office.