



The wider Castletown: the designed landscape of the Wonderful Barn and Barn Hall

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THE MID-EIGHTEENTH-CENTURY GRANARY KNOWN AS THE WONDERFUL BARN (PLATE 1), 1.8km north-east of Castletown House, has been well researched by scholars and is widely celebrated for its idiosyncratic ‘corkscrew’ architecture.¹ By way of contrast, the designed landscape that surrounds the Wonderful Barn and Barn Hall has been largely overlooked. This is undeserved, for the Wonderful Barn forms just one element in this farm complex (Plate 2), which is in many ways as innovative and modernising as the barn itself. This paper draws on archaeological excavations to recreate the mid-eighteenth-century layout of Barn Hall, its farm buildings and walled garden, and also highlights the probable role of the gentleman farmer Joseph Cooper.

When the Wonderful Barn was constructed in 1743, the Barn Hall estate, comprising sixty-one hectares in the townlands of Barnhall and Rinawade Upper and Lower, was leased by the Conollys to Joseph Cooper (d.1786) (Plate 3).² A stone plaque above the main west entrance to the Wonderful Barn bears an inscription ‘1743 execut’d by John Glinn’ (Plate 6). The 1740 Conolly rent rolls record that a John Glinn was resident at Pound Street in Leixlip, on the site of the current Glebe House.³ In 1786 the travel writer William Wilson wrote that Glinn had built the Wonderful Barn for the Conolly family.⁴ The Wonderful Barn does not appear on the two eighteenth-century estate maps commissioned by the Conolly family, nor on John Rocque’s 1760 map of the county of Dublin that did depict Castletown and other surrounding demesnes. Many of the eighteenth-century documents suggest that the prospect of the Wonderful Barn from Castletown House was not particularly significant, although its appearance in the 1752 Nobel and Keenan map, the 1783 James Taylor map and the 1744 Baylie and Mooney map of Carton demesne suggest otherwise.⁵ The tree-lined avenue linking the barn and

1 – Archaeological excavation of one of the small dovecotes in the north-east courtyard next to the wonderful Barn (all photos by the author unless otherwise stated)



2– Barn Hall and the Wonderful Barn, from west, 1968 (courtesy Irish Architectural Archive)



3– Map of Joseph Cooper's Barn Hall estate (based on the 1837 Ordnance Survey map)

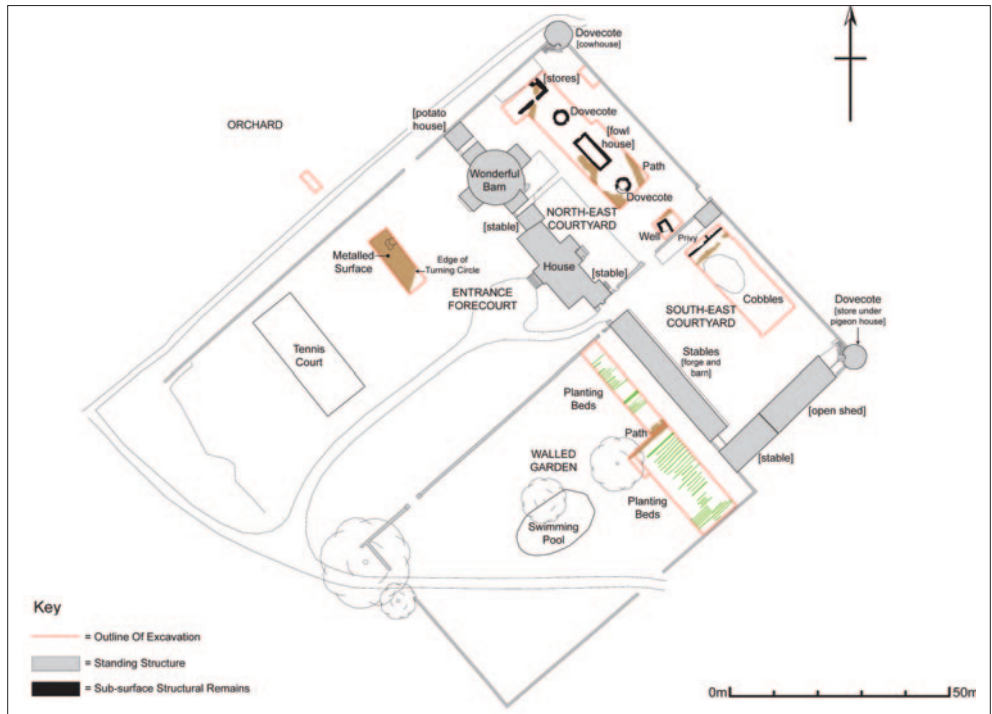
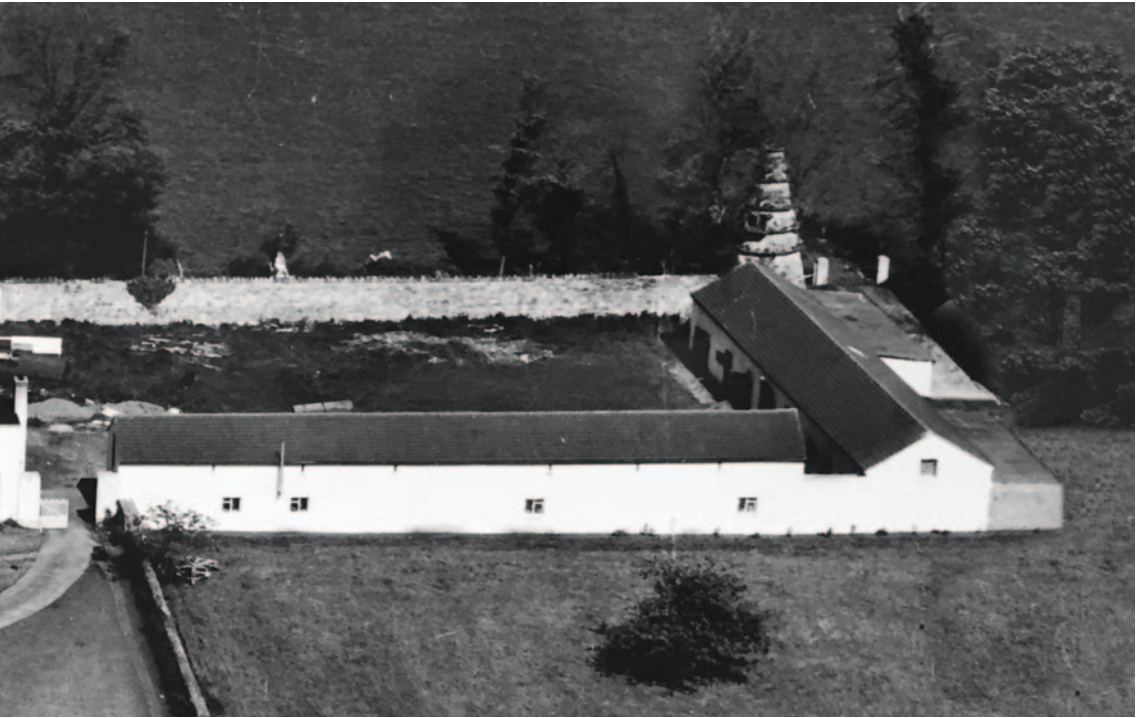
4 – First edition Ordnance Survey map of Barn Hall, 1837 (courtesy Ordnance Survey of Ireland)

opposite 5 – Barn Hall, layout and summary archaeological excavation plan

Building descriptions in square parenthesis are taken from the Griffith's Valuation House Books



THE WONDERFUL BARN AND BARN HALL





6 – *Plaque over front entrance commemorating the builder John Glinn's work on the Wonderful Barn in 1743*

the house today was laid out in the mid-nineteenth century and enjoyed from the first-floor windows on the east side (now the Blue Bedroom).

In 1759 Thomas Conolly drew up (or renewed?) a lease to Joseph Cooper, ‘farmer’, for the ‘Houses, Outhouses, Barns, Buildings, Gardens, Orchards’ at Barn Hall.⁶ Joseph Cooper came from a family of agricultural improvers and landscape designers. His residence at Barn Hall suggests that he may have been involved in the design of the Wonderful Barn and/or its courtyards and walled gardens. Today much of Barn Hall survives relatively intact – despite spates of vandalism – as a detached two-storey, seven-bay house sited immediately beside the Wonderful Barn. Behind the house and barn stand two walled courtyards, and a walled garden lies to the south-west (Plates 2, 5). Most of the original entrance court survives, as does an open area north of the barn that may have been an orchard. Whilst the general topography of Joseph Cooper’s courtyard farm at Barn Hall can be reconstructed from these standing remains and the nineteenth-century Ordnance Survey (OS) maps, written records that might reveal the functions of the two courtyards and the various buildings they contain are lacking (Plate 4). Similarly, historical information is wanting on the layout of the eighteenth-century walled garden and its planting arrangements, and on the make-up of the entrance court area. To address these gaps, archaeological research excavations and geophysical surveys were under-



*7 – Excavations underway at the entrance forecourt Barn Hall
(taken from west)*

taken at Barn Hall in 2015-16. What follows is a summary of the key outcomes of the investigations.⁷

Excavations immediately to the west of the main entrance into the Wonderful Barn revealed a metallised surface of spreads of hard, highly compacted gravel and small angular stones. This was defined on the south by a rough kerb of larger rounded stones, probably part of a turning circle for carts and coaches (Plates 5, 7). Repairs to potholes in the metallised surface were evident in the form of tightly packed settings of rounded large stones and crushed red-brick. The hard surfacing and turning circle documented in the excavation formed part of an impressive prospect that was created by the front (west) façade of Barn Hall and the Wonderful Barn. The visual impact of this façade was maximised by deliberately obstructing views towards the house until visitors had turned the north-west corner of the walled garden and had moved into the main avenue forecourt (Plate 13).

The excavations in the north-east courtyard revealed the foundations of two curious 3.75m-diameter freestanding circular structures (Plates 1, 7). A horse skull was buried beneath the clay floor of the northernmost example, perhaps as a good-luck token. The circular structures are marked on the historic OS maps but without a function being ascribed to them (Plate 4). However, a compelling analogy is to be found at Whitehall,



8 – Dovecote (built c. 1742) of similar form to those at Barn Hall, at the White Barn, Whitehall, Co Dublin

county Dublin, where a freestanding conical dovecote of similar dimensions (3.5m external diameter) stands intact next to the White Barn, built in 1742 by Major Hall, who was, like Joseph Cooper, a lessee of the Castletown estate (Plate 8).⁸ The extant dovecotes built at the corners of the courtyards at Barn Hall are also somewhat similar, though much larger. Other direct parallels from Ireland are unknown, but an English example is recorded at Harlyn House, Cornwall.⁹

The dovecotes were positioned on either side of a 9.3m x 3.8m rectangular structure which can be equated with a ‘fowl house’ mentioned in the Griffith’s Valuation House Books (Plates 5, 9).¹⁰ At the north end of the north-east courtyard, a 8.7m x 4.15m rectangular building, termed a ‘store’ in the House Books, was also uncovered, and at the opposite side of the yard a blocked rectangular stone well was excavated. Further discoveries included a diagonal cobbled path that led from the rear (east) entrance of the Wonderful Barn towards the standing conical dovecote in the north-east corner of the yard, and further diagonal paths of gravel on the south side of the yard. Surfacing elsewhere comprised pounded stones, which were probably originally covered over with a thin layer of gravel and clay. This form of metalling together with the direct link between the yard and the barn suggest that the north-east courtyard was primarily a stack-yard, where dried corn was brought for stacking before being threshed. But while the court-



9 – Excavation area in the north-east courtyard, showing (left to right) foundations of rectangular store building, diagonal cobbled pathway, a dovecote on either side of a ‘fowl house’

yard was primarily a utilitarian space for processing grain for storage in the granary, the ornamental dovecotes, probably better considered as ornamental follies rather than substantively functional broiler houses, provided a polite, formal and somewhat idiosyncratic element to this space.¹¹

The excavations uncovered a finely cobbled yard surface with channels and a distinctive north-south camber to facilitate drainage in the south-east courtyard, below later clay make-up deposits (Plate 5). Three pedestals sat proud of the cobbles and were possibly the remains of hitching posts for horses. Part of the south wall and the internal dividing wall between the two privies documented in the House Books and marked on the nineteenth-century OS maps were also revealed in the north of the courtyard, alongside a cobbled path. The House Books provide some indication of how these buildings were used (Plate 5). Corn-producing farms such as Barn Hall required many horses for ploughing and a myriad of other tasks, and large stables were required. These were located on the west side of the south range, beside an open-sided hay shed, used presumably to store hay for fodder and straw for bedding. A forge to supply the farmstead with iron tools and to shoe horses was located in the west range, beside another barn, which was probably used to store feed for the animals. The farm buildings, along with the cobbling and drainage, suggest that the south-east courtyard was a solely utilitarian space that serviced

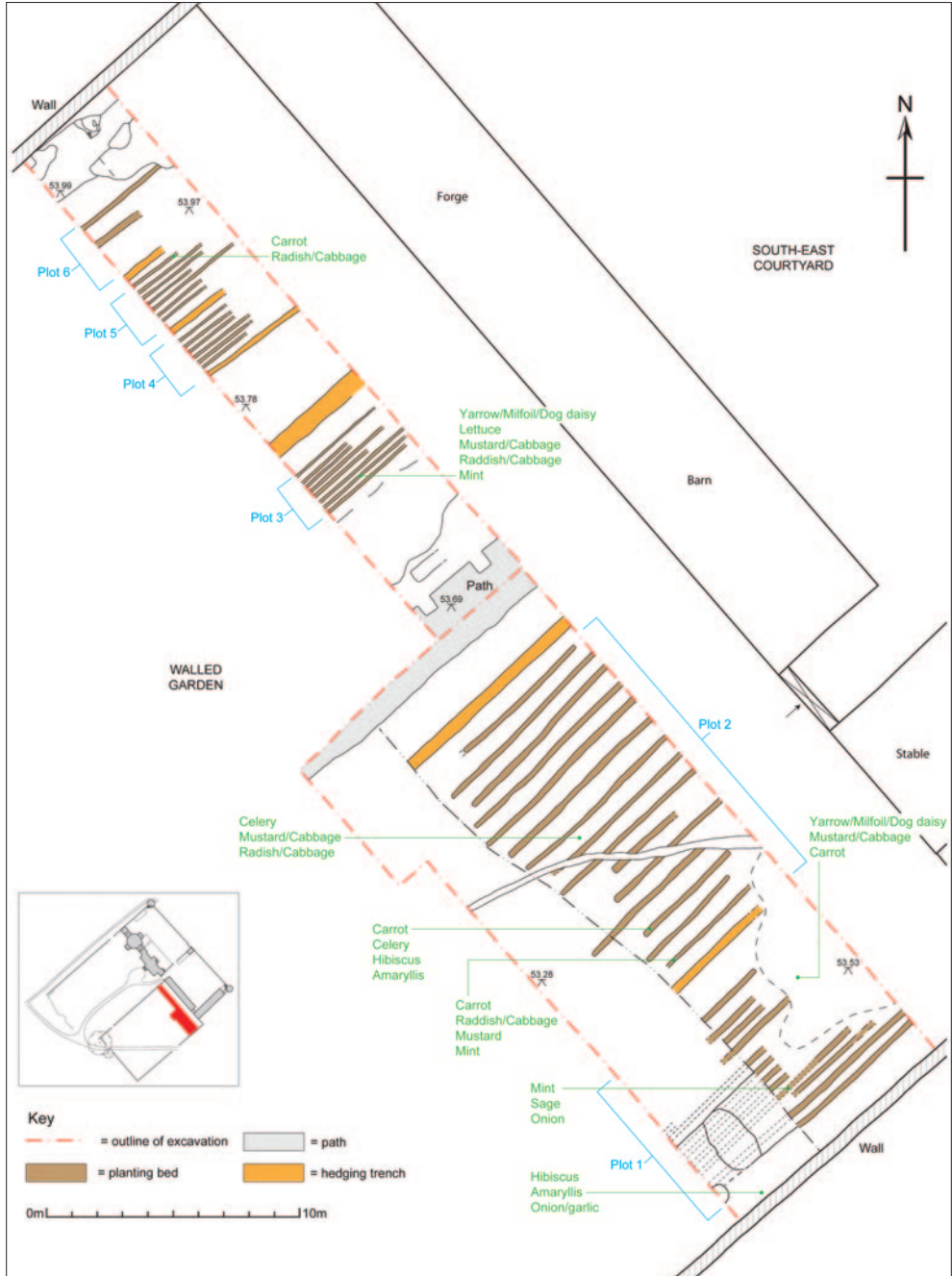
the estate farm, an interpretation underlined by the absence of any direct access to the more polite space of the north-east courtyard.

THE WALLED GARDEN

THE EXCAVATIONS IN THE ONE-ACRE WALLED GARDEN UNCOVERED A CENTRAL 2.5M-wide path surfaced with crushed lime-mortar and running north-east to south-west (Plates 5, 10). Two well-defined planting-holes, probably for ornamental trees, were noted on the north side of the path and there were some indications of border planting alongside it. Accordingly, the walled garden was laid out to a fairly standard plan, being divided into four equal blocks by cross-paths. The paths would have been lined with a narrow border which was planted with flowers; daisy was identified in the archaeobotanical assessment.¹² Interesting information on planting techniques in the walled garden was also brought to light by the excavations. Five distinct planting plots were recorded within the excavated area, two in the quadrant to the south of the path and four in that to the north (Plate 11). All of the planting features had been cut into an introduced subsoil horizon that contained coins of George I (1719-24) and George II (1737-

10 – Excavations underway in the walled garden of Barn Hall (from north)





11 – Excavated planting beds and paths in the Barn Hall walled garden.
Botanical remains from soil samples are noted in green.

(all drawings by Philip Kenny, Kilkenny Archaeology)

38), thereby dating the construction of the walled garden to around the time of Joseph Cooper's tenure at Barn Hall. There was no indication that the excavated planting features overlay an earlier gardening layout, and their geometry also differed markedly from the diagonal paths that are shown on the first edition OS map (Plate 4). Accordingly, the planting layout revealed by the walled garden's excavation is most probably the primary, mid-eighteenth-century gardening layout. The planting plots contained rows of narrow 20cm-wide x 3-8cm-deep linear trenches that ran parallel to the central path and were spaced on average 20-30cm apart, with the exception of those in the plot immediately south of the path, which were spaced at 50cm intervals. The plots were defined into distinctive groups by 40cm wide hedging trenches (Plate 11). The spacing of the planting rows accords well with Duff's recommendations from 1807 that cabbage drills should be two feet apart and herbs and Brussels sprouts should be two to two-and-a-half feet apart.¹³ Drills six inches apart may have been used for nursery planting or for salad crops. The arrangement of long narrow drills, and to a certain extent the plants identified in the archaeobotanical analysis (see below), indicate that the walled garden was effectively a Georgian kitchen garden or 'potager' – a productive garden whose primary purpose was to keep the kitchen supplied with fresh vegetables and fruit.

The soils in the planting rows were enhanced with manure that contained molluscs, which raises the pH of acidic soils, and ash and charcoal, which is also added to improve soil quality. Archaeobotanical analysis of soil samples from the rows suggested the charcoal derived from pruning offcuts, which was probably burnt as part of garden waste and incorporated with other organic material (for example, dung and household waste) into the soils as a fertilizer. Beranger's 1766 view of Monkstown castle appears to show gardeners digging closely spaced linear drills of similar form to those recorded at Barn Hall, and other good comparisons for the Wonderful Barn planting trenches have been noted in excavations at Castle Bromwich, Birmingham and Aberglasney Gardens, Carmarthenshire (Plate 12). Excavations at both gardens produced planting beds that were also heavily manured and comparable in size and spacing intervals to those at Barn Hall.¹⁴ The trenches on both sites were interpreted as bedding trenches for plants, although an alternative suggestion that they were 'dug to hold manure below a deeper, rectangular planting bed' was made.¹⁵

Seeds and charcoal recovered from the archaeobotanical analysis of soil samples allow for some insights into the plant species that were growing in and around Barn Hall's walled garden in the eighteenth century (Plate 11).¹⁶ Seeds from the mint/deadnettle, mustard/cabbage, mallow and carrot families were identified, and some were probably grown in smaller vegetable or herb gardens within the larger enclosure of the walled garden. Charcoals from willow/poplar, cherry-type, walnut, holly, pomaceous fruitwoods and beech were also found, representing a mix of fruit and nut trees along with species suitable for hedging and borders. Such tree species were commonly recorded on large Irish late seventeenth-century estates. Some assumptions can also be made regarding other planting in the walled garden. The longest walls were orientated east-west to maximise



12 – ‘Monckstown’ by Gabriel Beranger (1766)

The painting of Monkstown Castle, Co Dublin, appears to show gardeners digging drills of similar form to those excavated in the walled garden at Barn Hall (courtesy National Library of Ireland)

the space available to train fruits such as apricots, peaches and nectarines along the warmest north wall.¹⁷ The east and west walls would typically have been used for growing hardier fruits such as cherry, apples, pears and plums, whilst the coolest south wall was used for hardier species like filberts and Morello cherries (Plate 13). A glasshouse may also have been used, and some of the broken glass retrieved in the excavation may have originated from such a structure.

The creation of Barn Hall in the 1740s coincided with the movement to modernise the rural economy which saw a cohort of ‘improving landlords’ implementing the latest scientific developments in tillage farming, animal husbandry, land reclamation and land enclosure in order to increase output. The physical landscape created at Barn Hall bears all the hallmarks of the type of landed estate where the ‘New Farming’ promoted by the likes of Stephen Switzer, Jethro Tull and Robert Molesworth would have been practiced.¹⁸ Furthermore, the topography and the ‘formal ordering of plan and façade’ that is seen at Barn Hall connects it to a small number of other Irish early Georgian ‘courtyard farms’.¹⁹ Barn Hall, together with the Wonderful Barn, is an instance of innovation and progress in the wider Castletown landscape.



13 – Reconstruction plan of Joseph Cooper’s Barn Hall, c.1770, showing the entrance route which was designed to give maximum visual effect to the impressive facade formed by the Wonderful Barn and Barn Hall

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ENDNOTES

- ¹ Lord Walter Fitzgearld, 'Castletown and its owners', *Journal of the Kildare Archaeological Society*, vol. 2, no. 6, 1898, 377; Lena Boylan, 'The Wonderful Barn', *Journal of the County Kildare Archaeological Society*, 28, pt. 3, 1997, 337-47; James Howley, *The Follies and Garden Buildings of Ireland* (Yale, 2004) 211-15; John Colgan, *Leixlip, County Kildare* (Leixlip, 2005) 231; Finola O'Kane Crimmins, 'The Wonderful Barn, Historic Landscape Assessment Report', unpublished report for Kildare County Council, 2011.
- ² Boylan, 'Wonderful Barn', 343. In 1773 a further seventy acres at Parsonstown was leased to the estate.
- ³ Colgan, *Leixlip*, 231.
- ⁴ William Wilson, *The Post-Chaise Companion or Traveller's Directory Through Ireland* (Dublin, 1786) 99; Fitzgearld, 'Castletown and its owners', 377; Boylan, 'Wonderful Barn', 339; Colgan, *Leixlip*, 231; Howley, *Follies and Garden Buildings*, 212, 214.
- ⁵ O'Kane Crimmins, 'Wonderful Barn', 11.
- ⁶ Boylan, 'Wonderful Barn', 343-44.
- ⁷ Cóilín Ó Drisceoil and Barry Fitzgibbon, 'Archaeological Excavations 2015-16 at the Wonderful Barn, Leixlip, Co Kildare, 15E0324, Final Report' (Kilkenny Archaeology, 2017).
- ⁸ Howley, *Follies and Garden Buildings*, 211-12.
- ⁹ <https://historicengland.org.uk/listing/the-list/list-entry/1212749> (accessed 7th March 2018).
- ¹⁰ The Griffith's Valuation 'House Books' contain descriptions of the farm buildings that surrounded the house and barn in 1842 and 1850, and by comparing the measurements given in the House Books to the excavated buildings and those marked on the 1837 Ordnance Survey map, it is possible to assign functions to many of these structures. The House Books for Barn Hall are available from the National Archives of Ireland online at: http://census.nationalarchives.ie/search/vob/house_books.jsp (accessed 7th March 2018).
- ¹¹ Peter Hansell and Jean Hansell, *Dovecotes* (Oxford, 2010) 26-38.
- ¹² Ó Drisceoil and Fitzgibbon, 'Excavations at the Wonderful Barn', 82-89.
- ¹³ George Duff, *The Vegetable Garden, Containing the Names and Qualities of the most approved vegetables* (Dublin, 1842) 37.
- ¹⁴ Chris K. Currie and Martin Locock, 'Excavations at Castle Bromwich Hall gardens 1981-91', *Post-medieval Archaeology*, 27, 1993, 124; Kevin Blockley and Ian Halfpenney, *Aberglasney House and Gardens: archaeology, history and architecture*, British Archaeological Reports, British Series, 334 (Oxford, 2005) 73-74. Chris K. Currie, *Garden Archaeology, A Handbook*, Council for British Archaeology Practical Handbook, no. 17 (York, 2005) fig. 26.
- ¹⁵ Blockley and Halfpenney, *Aberglasney House and Gardens*, 74.
- ¹⁶ Ó Drisceoil and Fitzgibbon, 'Excavations at the Wonderful Barn', 82-89.
- ¹⁷ John Watkins and Tom Wright (eds), *The Management and Maintenance of Historic Parks, Gardens and Landscapes*, English Heritage Handbook (London, 2007) 204.
- ¹⁸ John Feehan, *Farming in Ireland: history, heritage and environment* (Dublin, 2003) 93-96.
- ¹⁹ Frederick H.A. Aalen, Kevin Whelan and Matthew Stout (eds), *Atlas of the Irish Rural Landscape* (2nd edn., Cork, 2011) 226-27.