

TEST PIT EXCAVATION WITHIN CURRENTLY OCCUPIED RURAL SETTLEMENTS IN THE CZECH REPUBLIC, NETHERLANDS, POLAND AND UNITED KINGDOM – RESULTS OF THE CARE PROJECT IN 2022/23

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2022–23 was the final full year of the ‘Community Archaeological in Rural Environments Meeting Societal Challenges’ (CARE-MSoC) project, which was granted an extension to compensate for delays caused to the test pit excavation programme in 2020 and 2021 by the COVID-19 pandemic. The extension enabled fieldwork to take place in the Netherlands, Czech Republic and UK (Fig. 1). 120 test pits were excavated and the results of these are summarised here as an update to previous reports in *Medieval Settlement Research* reviewing the outcomes of nearly 200 test pits excavated in 2019 and 2020 (Lewis *et al.* 2020; 2021; 2022a). The reviews published here in *Medieval Settlement Research* focus on information pertaining to the historic development of medieval rural settlements. The CARE project has also investigated the social impact of public participation in local research-driven archaeological investigation, and data pertaining to this have also been collected, analysed and published in journals focussed on heritage and health (e.g. Lewis *et al.* 2022b; Brizi *et al.* 2023).

Results

Czech Republic (P.V.)

The priority for the CARE project in the Czech Republic in 2022 was to excavate one or two more test pits in villages where this would bring the total number up to the target of 25, while focussing most attention on villages such as Merboltice where the number of excavated pits remained well below this target.

Merboltice/Mertensdorf, distr. of Děčín (50° 41' 06" N; 14° 20' 25" E)

Fourteen more test pits were excavated by fifteen local people in Merboltice in 2022 (Fig. 2), adding to those excavated in 2021 (Lewis *et al.* 2022a, 51–57) bringing the total overall to 25. Eight of these pits were sited to recover further information about the St Catharina church (demolished in 1974) and the character of its remains (test pit Nos 12–14, 16–20). The excavations in 2022 enabled the complete plan of the building to be recovered, with these archaeological data being used to

inform the architectural project aiming to reconstruct the church.

The other six test pits excavated at Merboltice in 2022 (Nos 15, 21–25) investigated three farms that were selected to cover all three sections of the village: the central part near the parish church (Farm No. 141) and the north-eastern (Farm No. 106) and south-western (Farm No. 15) ends. The aim was to obtain archaeological data which would help us understand the development of the village layout, which takes the form of a long plan arranged along the stream valley. The excavations also aimed to explore the stratigraphic development of these farm plots, which lie on terraces on steep slopes above the bottom of the narrow valley. Test-pitting revealed intact layers associated with the earliest phase of the village (of thirteenth- to fifteenth-century date) in Farm Nos 15 and 141, and pottery fragments dating to this same period were also found in the third farm (No. 106), although here they were residual in a later deposit. Based on this evidence, we can infer that the village was founded in the thirteenth/ fourteenth or fifteenth century along the entire length of the stream valley, with the present layout of the settlement developing by a process of infilling between farms originally separated by greater distances. The observed depth of the stratigraphic sequences ranged from 0.5 m (Farm Nos 15 and 106) to almost one metre (Farm No. 141) (Fig. 3). This appears to reflect different processes of settlement and deposition on terraces that were constructed when the village was established. Finds of burnt daub fragments in some later medieval and post-medieval horizons may indicate destruction of timber farm buildings by fires, followed by their re-establishment.

Netherlands (J.V. and H.v.L.)

The easing of remaining COVID-19 regulations in the Netherlands enabled planned community test pit excavations in Schijndel, Boxtel and Esch to proceed for the first time in 2022, and some additional test pits to be excavated in Gemonde and Liempde to explore sites which could not be excavated during the pandemic. Several history teachers asked us to organise a participatory archaeology day for their students in the lead-up to the archaeology weekend in Schijndel, and in collaboration with the Elde College and with the assistance of the Sisters of Charity, we organised a dig

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Figure 1 Map of northern Europe showing the villages/territories where test pit excavation took place as part of the CARE project 2019–2022/3. Locations where investigation focussed in 2022/3 shown in yellow (J. Verspay).

in the garden of the monastery. In Esch, a reduction in the number of board members during the pandemic meant that the local historical society, De Kleine Meierij, no longer had the capacity to organise a village-wide test pit excavation. Instead, we decided to organise an archaeology project for students in grades 7 and 8 at St Willibrordus primary school. Thanks to a subsidy from the province of Noord-Brabant, CARE was able to continue beyond the end of its funded programme in 2023. Building on the results of previous projects, residents of Gemonde and Liempde continued their involvement in their respective villages. The level of interest stimulated by the test pit excavations to date in the Netherlands means that later in 2023 work will begin in new villages.

Boxtel (51° 35' 23" N; 5° 19' 48" E)

Boxtel is situated on a sandy elevation within the river valley of the Dommel. The area saw sporadic human occupation from the Middle Stone Age until it was abandoned for an extended period during Roman times. Not until the early Middle Ages were new settlements created and cultivation undertaken in the region, with the relatively fertile forested lands on the higher parts of the surrounding cover sand ridges the first to be cleared

and developed. These initial clearings formed the foundation for later agricultural complexes and their associated farmsteads. The earliest post-Roman remains in the vicinity of the town date back to the (late) Carolingian period.

A prominent site in Boxtel's early history is the church mound, presently occupied by St Peter's/Petrus Basilica. This elevated spot, formed by a sandy knoll within an old meander of the Dommel, played a significant role in the development of the town. Around the middle of the eleventh century, the lord of Boxtel constructed a motte-and-bailey castle on this site, accompanied by a church (Dijstelbloem and Van der Eerden 2011). This fortress served as the power base for the lords of Boxtel and the centre of their immediate jurisdiction.

The feudal origins of Boxtel can be traced back to the tenth century, when a manorial estate was established under the authority of the German Emperor. Initially, the lords of Boxtel were probably appointed as stewards overseeing the domain, eventually receiving it as a fief. Throughout the High Middle Ages, their growing autonomy transformed the fief into their personal property (De Visser 2013). By the thirteenth and fourteenth centuries, Boxtel became increasingly

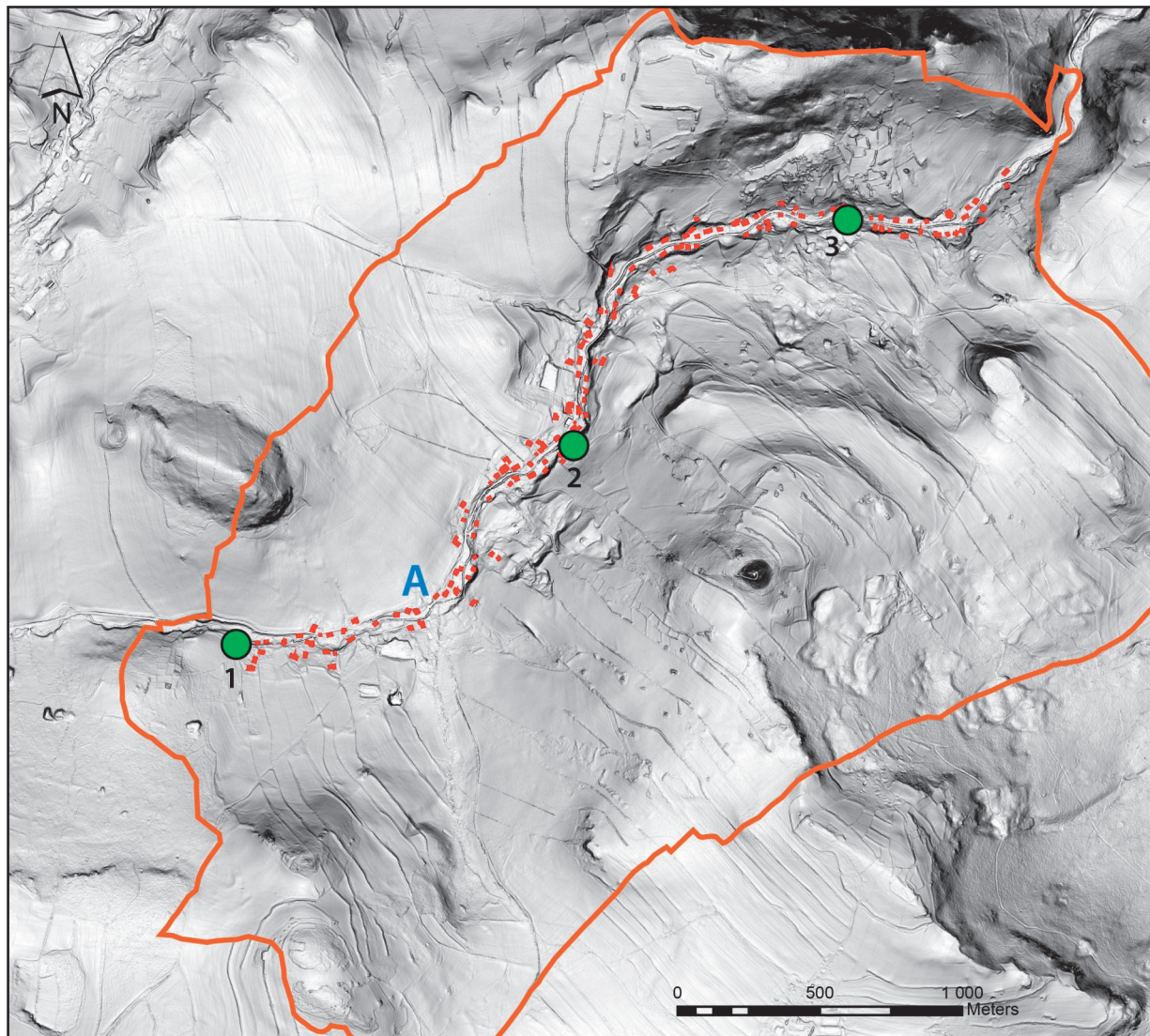


Figure 2 Digital Relief Model of the Merboltice (Czech Republic) cadastral territory based on airborne laser scanning, showing the approximate locations of the test pits excavated in 2022. A: former parish church; red dots: contemporary houses; orange line: cadastral boundary (data provided by the Czech Office for Surveying, Mapping and Cadastre; map by P. Vařeka).

integrated into the Duchy of Brabant, facing pressures to align with the authority of 's-Hertogenbosch. In 1439, Boxel pledged its allegiance to the Duke of Burgundy, breaching feudal loyalty to the Emperor. Despite this, Boxel retained its exceptional status within the Bailiwick until the area became part of Staats-Brabant following the Peace of Münster. The French invasion in 1794 and the establishment of the Batavian Republic led to the abolition of feudal rights, resulting in Boxel losing its status as a lordship.

According to Leenders' model, Boxel's historical development can be categorised into five distinct phases (Leenders 2000) (Fig. 4). Phase 1 (1050–1200) saw the construction of the moated motte around 1050 on a sand knoll in a bend of the Dommel, with a central building, a forecourt with grain storage and an accompanying church. The moat was fed by the Kleine Dommel artificial canal. Adjacent to the castle, an agricultural complex known as Borgakker may have been cultivated

directly by the castle farm, Spijkerhoeve. To the east lay the Strijpt, an area of arable land characterised by narrow strips typical of open-field systems. The Rechterstraat thoroughfare, intersecting the southern portion of the agricultural complex, was initially an uninhabited access causeway from a river crossing to the castle. Phase 2 (thirteenth century) saw the emergence of the earliest nucleated settlement along the riverbank of the Dommel, known today as Clarissenstraat. Boxel expanded eastward with the creation of a substantial rectangular market square surrounded by residential buildings and additional water channels, suggesting a well-planned seigneurial development. The existing castle chapel became the village church, signifying the growing importance of the settlement. Phase 3 (Late Middle Ages) saw more house plots laid out along the Rechterstraat in a deliberate, phased approach to urban planning. The road was paved by the late fifteenth century, reflecting its growing



Figure 3 Test pit at Farm 141 in Merboltice (P. Vařeka).

importance. Phase 4 (Early Modern Period) saw further residential expansion of the southern section of the Borgakker, and Phase 5 (1741–1832) the establishment of a stone paved road connecting 's-Hertogenbosch to Eindhoven in 1741, which played a significant role in Boxtel's development as new buildings were constructed along the Steenweg between 1741 and 1832.

The excavation of nine test pits by more than 50 participants aimed to test Leenders' model in Boxtel-Binnen, the central part of the town located between the watercourses (Fig. 5). Substantial soil re-deposition at various stages of the town development, including the raising of the banks of the Dommel to increase the amount of usable surface behind the houses, used locally sourced soil but meant it was not possible for every test pit to reach the natural subsoil.

Flint tools and debitage found in test pits 2, 5, 8, 9 and 15 indicate that Mesolithic hunter-gatherers sustained themselves here over 7,500 years ago. A much later fragment of glass La Tène bracelet and some pottery fragments in test pits 6 and 7 provide evidence of habitation in the Late Iron Age or early Roman period. Although these artefacts were found in the later soil deposits on the Dommel bank, a clue to their origin

can be found in the deformation of the bracelet, which indicates that it was burned and can be inferred to have come from a cremation grave. Burial sites from this period are usually found on higher parts of the landscape, the nearest of which is the sand knoll on which St Peter's Basilica now stands. It is therefore likely that there was a late Iron Age cemetery here.

The origin of the seigneurie of Boxtel is thought to date back to the tenth century, associated with the establishment of a manorial estate under the authority of the German Emperor. In several test pits, we found materials from this earliest phase. However, pottery discovered at Molenstraat (test pit No. 8) indicates that people had already been living there as early as the ninth or even eighth century. This suggests that the area around the present Zwaansebrug played a prominent role during that time, with the river crossing serving as the initial focal point of the settlement before it shifted to the castle area.

Although not all test pits could be excavated to the natural subsoil, a significant amount of medieval pottery was found in this area, identified by Leenders as the origin of the seigneurie. Elmpt, Paffrath, Pingsdorf, and Zuid-Limburg pottery found in the test pits on Clarissenstraat (Nos 5–7) correlate with the earliest phase of the town. Additionally, Andenne pottery and Elmpt ware from test pit 16, as well as a piece of Zuid-Limburg pottery in test pit 15, indicate that the Strijpt area was indeed used as arable land in the eleventh and twelfth centuries, prior to the establishment of the market around 1290.

No medieval pottery was found in the southern Borgakker area (test pit No. 10), but test pit 9 on the opposite bank of the Dommel did yield small numbers of Elmpt and Paffrath ware sherds indicating that the area was used for agriculture in the twelfth or thirteenth century.

Boxtel flourished as a prosperous town in the late Middle Ages. Discoveries from the Rechterstraat (test pit No. 15) bear witness to a lavish food culture, including roast meat and oysters brought in from the Zeeland delta (De Jong 1994). In this region such delicacies are only known from castle sites and aristocratic town houses (De Jong 1992; Van Genabeek and Nijhof 2019). From more recent periods, the material culture from the test pits in Boxtel also differed significantly in some respects from that of other villages nearby. For instance, a considerably larger number of tobacco pipes were found here, indicating that smoking was adopted more widely in the seventeenth century. Another notable finding was the high number of writing styli or slate pencils found in various locations, indicating that a significant portion of the inhabitants were literate. The presence of various schools in the seigneurie certainly contributed to this. Some of these differences can be attributed to a higher population density, but they also hint at a subtly distinctive, somewhat more urbanised cultural milieu.

Esch (51° 36' 41" N; 5° 17' 36" E)

Located within the municipality of Boxtel, the small church village of Esch is situated on a cover sand ridge along the Essche Stroom river. Its historical roots can be traced back as early as AD 773 when Nebelung, an individual of note, bestowed various properties in the villa of 'Hesc' upon the Abbey of St Willibrord in



Figure 4 Model for the historic development of Boxtel, after Leenders 2000 (J. Verspay).

Figure 5 Map of Boxtel, North-Brabant, showing the approximate locations of the test pits excavated in 2022 (topographic map © Kadaster) (J. Verspay).

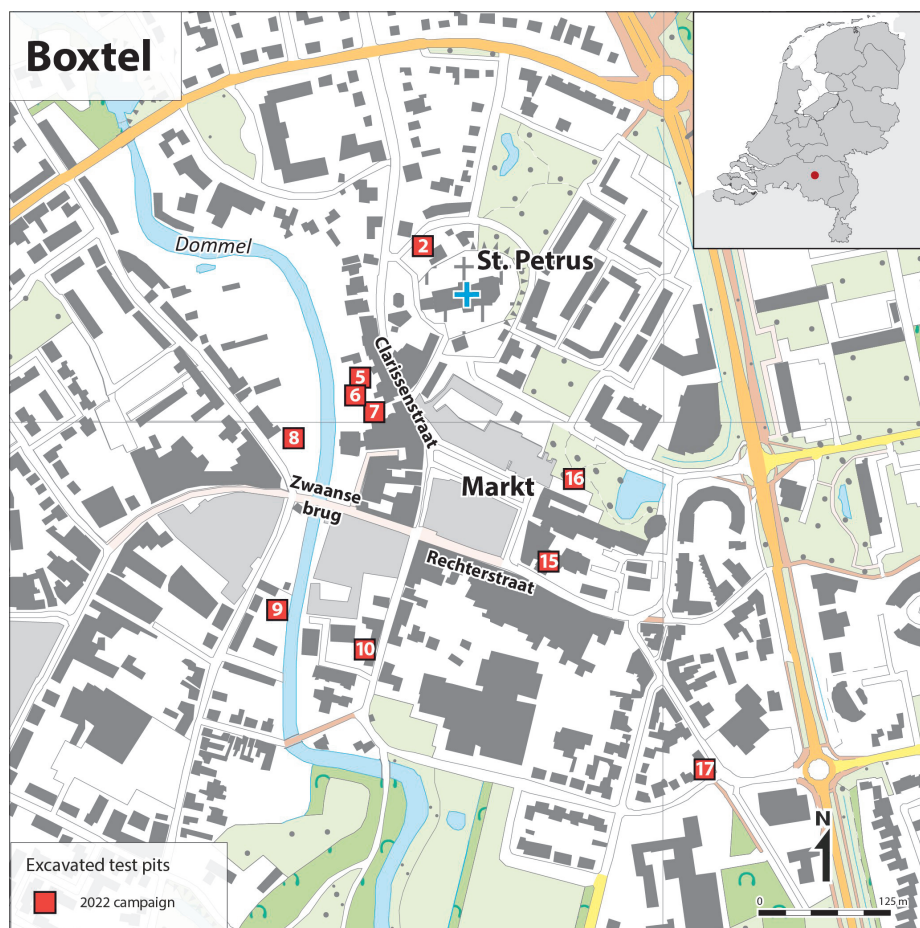


Figure 6 Map of Esch, North-Brabant, showing the approximate locations of the test pits excavated in 2022 (topographic map © Kadaster) (J. Verspay).



Figure 7 Excavations on the Baerschot estate confirmed its transformation from a farm to a moated country estate took place in the second half of the sixteenth century (J. Verspay).

Echternach, Luxembourg. This endowment included four farms, land, houses, fields, meadows, forests, standing and flowing water resources, and the dependent peasantry. It is noteworthy that one of the Echternachtse rights extends to Kollenberg, an area where a number of Roman-era elite graves were discovered from 1950 to 1952 (Van den Hurk 1986; De Bont 1989). During this period, Esch appears to have held a prominent position, as subsequent excavations have confirmed the presence of two villas on either side of the river. However, apart from the discovery of a single Merovingian throwing axe along the riverbank, there is no evidence for settlement continuity after the Roman era (Sambeek and Van de Langenberg-Scheepers 2010).

Medieval Esch developed on a high river terrace to the east of the Essche Stroom. The location was probably chosen because of its proximity to an ancient river crossing, facilitating communication and trade (Roymans and Keijers 2008). The original centre of the village, adjacent to the church, later expanded along the course of the Essche Stroom, resulting in a more or less linear settlement pattern. The village is surrounded by cultivated lands and retains a mostly agrarian character. The church probably played a role in nucleating the spatial organisation of the settlement. Across the river, farms were dispersed along the sand ridge, delineating the transition zone between cultivated fields and extensive grasslands. During the late Middle Ages, Esch attracted affluent individuals from 's-Hertogenbosch, who sought to establish prestigious manor farms and country estates. Often these were surrounded by moats used primarily as markers of social status rather than for defensive purposes.

One such manor house is Baerschot, located on the northern bank of the Essche Stroom. A pen drawing by Joshua de Grave from 1681 depicts an exquisite country house, which was documented as a castle in 1715. The location of the estate is known from the Ordnance Survey. Interestingly, the house is depicted outside the moat during this period, raising the possibility that an earlier structure lay within the moat. The earliest record of Baerschot dates back to 1501, when it is described as

a substantial farm that included two other houses and fishing rights. It is worth noting that this estate paid rent to the prestigious Abbey of Echternach, whose properties in this region were mostly acquired during the Carolingian period, raising the possibility that Baerschot farm might date back to that time and be one of the properties bestowed by Nebelung to Willibrord.

50 students from the local primary school carried out metal detector surveys and dug three test pits. The pits were excavated in the garden behind the current (twentieth-century) country house (Fig. 6), strategically positioned to observe different areas (Fig. 7): test pit 1 where the earlier house was thought to have been; test pit 2 on the site of the eighteenth-century country house; and test pit 3 west of the manor near the former coach house which was demolished in 1965, after which the current country house was constructed on the contours of the original (sixteenth-century) farmstead.

Test pit 3 produced debris and pottery dating from the eighteenth to early twentieth centuries, corresponding to the converted old coach house. Test pit 1 revealed a layer of arable soil, in which finds predominantly of seventeenth- and eighteenth-century pottery and tobacco pipes also included a piece of hand-formed pot dating back to the late prehistoric period and a Roman coin from the first century AD. Unfortunately, we were unable to complete the excavation down to the natural subsoil level. Test pit 2, within Baerschot castle grounds, revealed a layer of arable soil overlying well-preserved large soil features, potentially a pit or moat, containing pottery and stoneware from the second half of the sixteenth century. This coincides with a change in the description of Baerschot in the archival records from a farmstead (1558) to a moated manor (1604) (Sambeek and Van de Langenberg-Scheepers 2010, 35). No identifiably older material was found at this location.

The lack of late medieval artefacts suggests that the 1604 manor was not constructed on the exact location of the documented fifteenth-/early sixteenth-century farmstead, although the creation of the pit or moat may have displaced earlier deposits. If the existing farm was not replaced, it might have been put to a different use. Possibly the coach house originates from this.

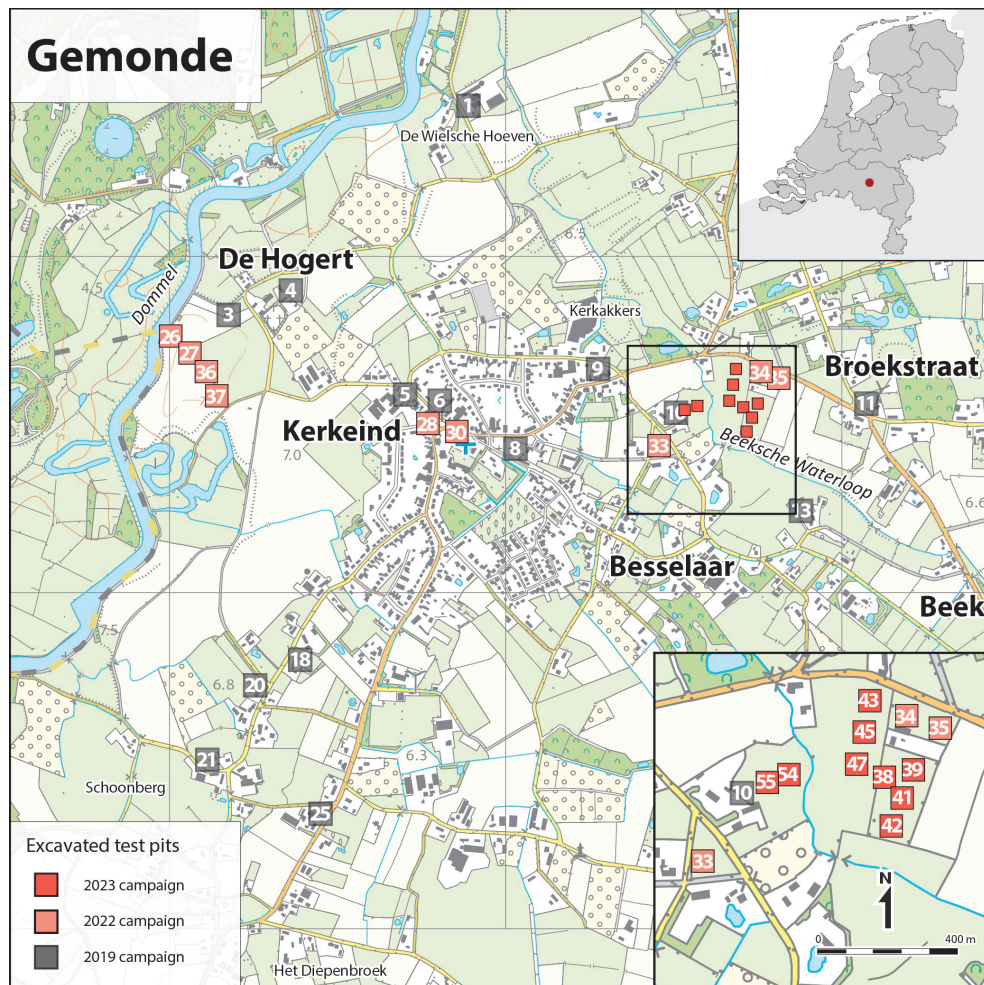


Figure 8 Map of Gemonde, North-Brabant, showing the approximate locations of the test pits excavated in 2019, 2022 and 2023 (topographic map © Kadaster) (J. Verspay).

Regrettably, test pit 3 only yielded eighteenth- and nineteenth-century artefacts among the construction debris. Thus far, no archaeological evidence has been uncovered to support a Carolingian origin of Baerschot. However, the discoveries do indicate that the area was utilised during the Iron Age and the early Roman period.

Gemonde (51° 37' 9" N; 5° 21' 29" E)

In 2019, our findings indicated that the habitation in the current village centre of Gemonde was preceded by a settlement cluster at the Hogert, the head of an elongated glacial sand ridge along the river Dommel (Lewis *et al.* 2020, 85–6). The discovered artefacts supported the presumed presence of a manorial complex associated with a domain estate (Verspay 2022). Pottery from the Merovingian period confirms the actual occupation of this location during the Christianisation activities of Lambertus and Willibrordus, to whom the estate was endowed at the end of the seventh century. The site already seems to have held significance, as is evidenced by continuous occupation dating back to the Iron Age, and even earlier, as finds also indicate habitation sometime during the Bronze Age.

The earliest evidence of habitation or agricultural land use within the current village centre can be traced

back to the High Middle Ages and early Late Middle Ages. Rather than a nucleated settlement, however, these finds indicate the establishment of a number of dispersed farms, situated at the foot of the cover sand ridge, on the edge of open fields. A more densely occupied settlement, clustered around the Dorpstraat, seems to have developed only in the seventeenth or eighteenth century. This nucleation appears to coincide with the establishment of a barn church in 1674 (Coenen 2004, 266).

On the eastern side of the village, the wilderness named ‘Bodem van Elde’ in 1314 by the Duke of Brabant appears to mark the starting point for the reclamation of this area. Each of the test pits excavated on this side in 2019 yielded some artefacts from the Late Middle Ages. A sherd of a globular pot dating from the eleventh or twelfth century tentatively suggests that the hamlet of Besselaar might have already existed at that time, possibly as a property of the illustrious lords of Rode. This could explain why Besselaar has always remained under the jurisdiction of the town of Sint-Oedenrode, the main town of the seignury.

The 2022 excavation aimed to gather additional data from the historical village centre and the area surrounding Besselaar. At the request of several amateur archaeologists, a few test pits were also dug on the

Figure 9 Finds of high medieval pottery, like this globular pot sherd, indicate that Besselaar predates the grant of the Bodem van Elde forest in 1314 and its subsequent reclamation (J. Verspay).



cover sand ridge to the west of the village to verify a suspected presence of an early medieval settlement based on surface finds they had previously made. Ultimately, 40 participants excavated nine test pits over the weekend (Fig. 8).

In the open-field complex along the Dommel river, a row of four pits was dug at right angles to the direction of the sand ridge. Each pit yielded pottery from the late prehistoric period. The highly fragmented nature of the pottery can be attributed to extensive ploughing, indicating that the entire area has long been part of the cultivated land. It also suggests that the land was already being actively fertilised during this period through the deposition of household waste on the fields. Subsequent finds from different periods further demonstrate the continuous use of the sand ridge as agricultural land. In the westernmost test pit (No. 26), near the Dommel river, intact archaeological features were discovered beneath the thick man-made ploughsoil. Roof tiles and a sherd of a coarse-ware pottery bowl date these features to the Late Roman or Merovingian period.

In the pit located near the rectory, the soil was found to have been recently disturbed. However, in the front garden of a nearby former farmhouse at Sint Lambertusweg 113 (No. 28), pottery from the seventeenth and eighteenth centuries confirmed the relatively recent formation of the village centre.

In the former clay forest area along the road to Schijndel, test pit 35 revealed well-preserved features containing substantial fragments of grey-fired pottery of fourteenth-century date. If these are associated with a toft, it could potentially indicate the presence of a reclamation farm.

The test pit in the green of Besselaar (No. 33), however, did not yield any medieval pottery. This might be due to its low position in relation to its surroundings. The soil bore evidence of deep tillage in the eighteenth century, probably carried out to improve drainage.

To investigate further the reclamation of the Bodem van Elde, and the possibility that Besselaar was in existence in the twelfth/thirteenth century, we conducted

additional test pit excavations in the hamlet in 2023. Our focus was primarily on the historic farm where we previously discovered high medieval pottery, as well as the elevated fields adjacent to the Beekse waterloop, a nearby brook. These areas were identified as the most probable locations of arable fields in the marshy region prior to reclamation. Over three days, a team of 47 participants excavated nine test pits. Five pits yielded fragments of high medieval pottery (Fig. 9), including Andenne, Elmpt, Kempen, and Pingsdorf ware. This supports the notion that the settlement dates back to the twelfth or even eleventh century, a finding that aligns with the hypothesis that Besselaar originated as part of a manorial estate belonging to the lords of Rode. Of particular interest is a Roman coin dating to the second century AD, discovered during a complementary metal detector survey, which suggests human activity in this area predating previous estimates. Until now, evidence from this period was known solely from the Dommel area.

Liempde (51° 34' 15" N; 5° 22' 25" E)

Liempde has a multitude of iconic historic farms, which greatly contribute to the village's rural character and evoke an era when most of its inhabitants sustained themselves through agriculture. A comprehensive study was recently published by a group of local historians on the history of these farms, drawing on the extensive examination of timber frames, dendrochronological analysis and study of archival records. The CARE project offered the opportunity to establish how old the historical roots of these farmsteads are. On the three available former farmyards a total of four test pits were excavated by 32 participants.

At Eikendaal 6 (dated 1856), historical research reveals that the timber frame of this farmhouse dates back to the sixteenth century (De Witte 2022, 22). However, the earliest cadastral map published in 1832 does not depict the farmstead. It is not until 1856 that a house and yard are first registered on the plot. Based on a note in the cadastre, De Witte suggests that the farmhouse nevertheless may have existed at the time of

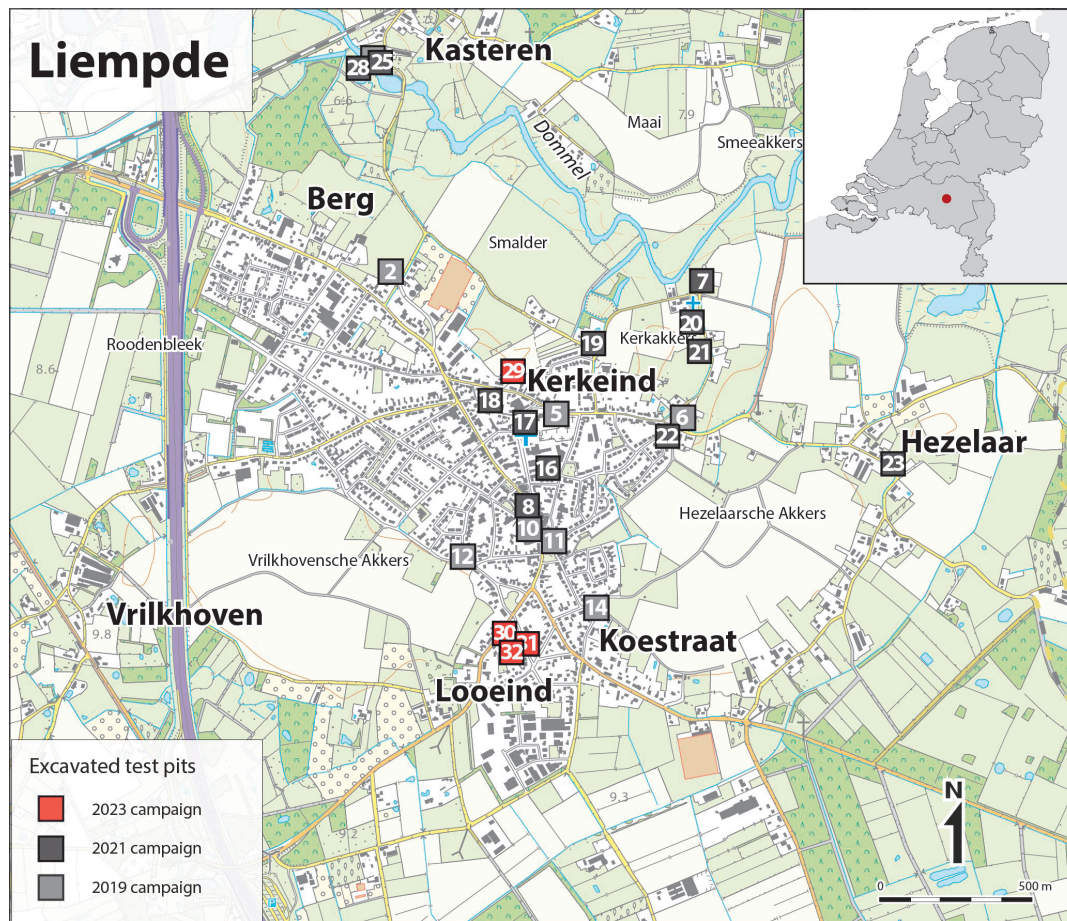


Figure 10 Map of Liempde, North-Brabant, showing the approximate locations of the test pits excavated in 2023 (topographic map © Kadaster) (J. Verspay).

the Ordnance Survey in 1832 but was not included on the map, possibly to evade taxes (De Witte 2022, 11). To test this hypothesis, two test pits were excavated on the premises. The absence of substantial quantities of material dating from the early nineteenth century or earlier, despite an abundance of artefacts from the late nineteenth and twentieth centuries, provides a strong indication that the farmhouse was indeed constructed in 1856, utilising an older timber frame. The suggestion that the farmhouse is older but not recorded in the cadastre lacks archaeological support. However, signs of previous activity are evident on the site. In the test pit located in the old orchard, an older feature was found. The pit was too small for us to determine its nature, and the examination of the upper fill did not yield any finds that could provide further dating.

The farm at Barrierweg 23 (dated 1635 ± 3 years) sat on the same (now lost) unpaved road as Eikendaal 6. It was situated against the road and had all its entrances in the long façade of the building, as was common in the region. The timber frame was dendrochronologically dated to the seventeenth century, with an extension that incorporates constructional elements from the sixteenth century (Steenbakkers 2017, 40). Due to practical constraints, the test pit was positioned at the periphery of the yard, close to the former road. The cultural layer in this area exhibited a relatively thin and slightly disturbed profile. Notably, pottery fragments (Elmpt ware) retrieved from this context can be traced back to

the early fourteenth century. Whether these artefacts can be attributed to the farmstead itself remains uncertain from this specific context. However, the presence of this material indicates that the hamlet, documented since the fifteenth century (Coenen 2004, 45), had been inhabited for at least a century.

At Kapelstraat 22 (dated 1728) in the Kerkeind hamlet, the iconic longhouse named ‘De Vonder’ derives its name from the narrow bridge that historically granted access to its forecourt (Steenbakkers 2017, 125). The timber frame of this listed monument dates back to 1728, although earlier finds suggest that the farm existed as early as the sixteenth century. Test pit excavation near the north-eastern portion of the short façade revealed remnants of a small annex that had housed a farm labourer (Fig. 11). The broken bricks in the back fill of the wall were discarded during its demolition around 1925. Analysis of the soil stratigraphy indicated that the structure was built on the former vegetable garden area. The layer of rich humus soil showed signs of cultivation. The oldest artefacts from this layer, salt-glazed stoneware and grey ware, date back to the fifteenth century, possibly even the fourteenth century.

As a result of the light shed by these test pit excavations, several other historic farm owners have expressed an interest in participating in future iterations of CARE test pit excavations.

Figure 11 Façade and test pit at the 'De Vonder' farm in the Kerkeind hamlet of Liempde, whose timber frame was built in 1728, possibly traces its origins back to the fifteenth century (J. Verspay).



Schijndel (51° 37' 9" N; 5° 21' 27")

The village of Schijndel is situated between the rivers Aa and Dommel. The distinctive landscape features are attributed to clay deposits that were formed during the most recent glacial period and subsequently overlain by a thin layer of drift sand (Heesters 1984). This clay impedes rapid drainage, resulting in the development of wetland forests and marshy heathlands. Schijndel is located on a modest cover sand ridge in this area where the soil was suitable for some agriculture. The village probably originated as an agricultural settlement, consisting of a number of dispersed farms. In addition to Schijndel itself, the village historically encompassed five outlying hamlets.

The first documented references to Schijndel in the thirteenth century are closely linked to the emergence of 's-Hertogenbosch as a thriving trading city and administrative centre in the northern region of the Duchy of Brabant. The strategic location of the village along a major thoroughfare connecting 's-Hertogenbosch with Maastricht, Aachen and Liège, as well as Venlo and Cologne, played a pivotal role in shaping its subsequent development. This route gave rise to a number of taverns and breweries. Set back from the main street were the church and market square. Drawing from the toponym *Chuijs*, Heesters postulates the presence of a (moated) stone house belonging to a local aristocrat who originally erected the church on their estate. The church, dedicated to St Servatius, probably dates back to around 1300. As the village came under the authority of the bailiff in 1232, it could no longer have been a seignury at that time. By the early fifteenth century, the village had a school and a Gothic church with a clocktower.

Due to the unsuitability of the marshy grounds surrounding the village for growing cereal crops, hop cultivation was adopted prior to the early fifteenth century. The hop industry thrived, particularly during the sixteenth and seventeenth centuries, bolstered by the

presence of numerous local breweries and access to supra-regional markets such as Antwerp and 's-Hertogenbosch (Van de Rijdt and Berkvens 2006). Over the course of the sixteenth century the Meierij region became a recurrent theatre of war and military conflicts. Schijndel endured several instances of pillaging and extortion, with Dutch forces completely devastating the village in 1583.

Subsequent periods witnessed the recurrent presence of marauding armies, mutinous troops and quartered soldiers, which posed a continuous threat to the area. These burdens heavily impacted the local population, leading to regional impoverishment. Additionally, the construction of a road between 's-Hertogenbosch and Eindhoven (1741–1789) significantly diminished the commercial traffic passing along Schijndel's old road.

Around the beginning of the nineteenth century, the craft of clog-making experienced a notable upswing. The clayey soils around Schijndel proved exceptionally suitable for the rapid growth of Canadian poplar trees whose soft wood is well suited to clog-making. Through the pre-emption right obtained in 1465, these trees were extensively planted along paths, roads, and property boundaries, resulting in the distinctive poplar landscape that characterises the region.

The test pit excavation programme aimed to investigate the correlation between the development of Schijndel, its proximity to the emerging city of 's-Hertogenbosch, and its position along a major trade route. A team comprising 100 volunteers and students excavated a total of 21 test pits (Figs 12–13). As the local historical society wished to process and analyse the finds themselves, the results are not yet fully complete. Nonetheless, analysis to date shows compelling evidence for late medieval settlement along the main road. Finds of Carolingian pottery (test pits 10, 11 and 26) indicate that this route may have existed for some time and connected several farmsteads as early as the early medieval period. Roman and Iron-Age pottery found in test pit 14 shows that the cover sand ridge was

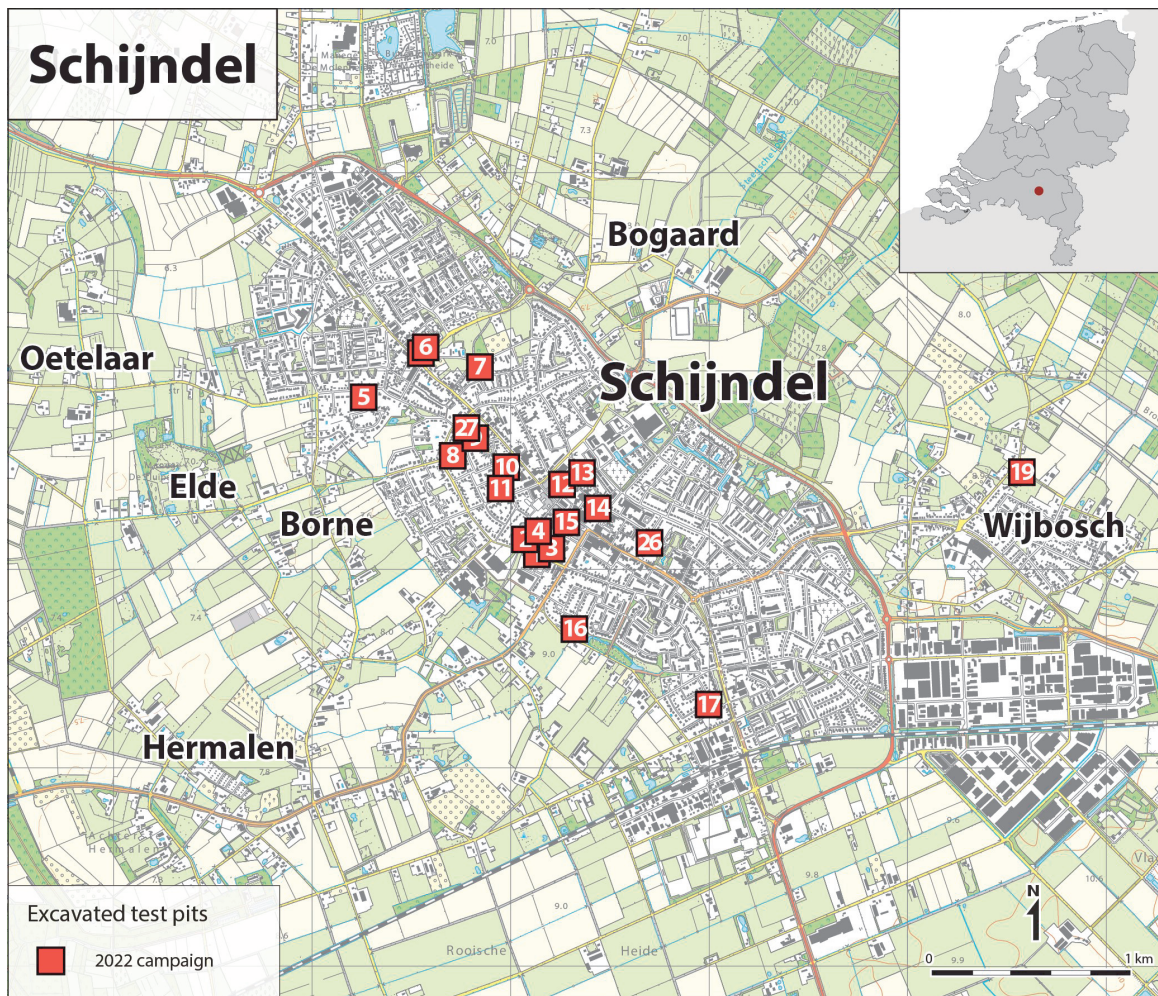


Figure 12 Map of Schijndel, North-Brabant, showing the approximate locations of the test pits excavated in 2022 (topographic map © Kadaster) (J. Verspay).



Figure 13 A test pit in Schijndel, North-Brabant under excavation by local children in a densely built-up residential area of Schijndel (J. Verspay).

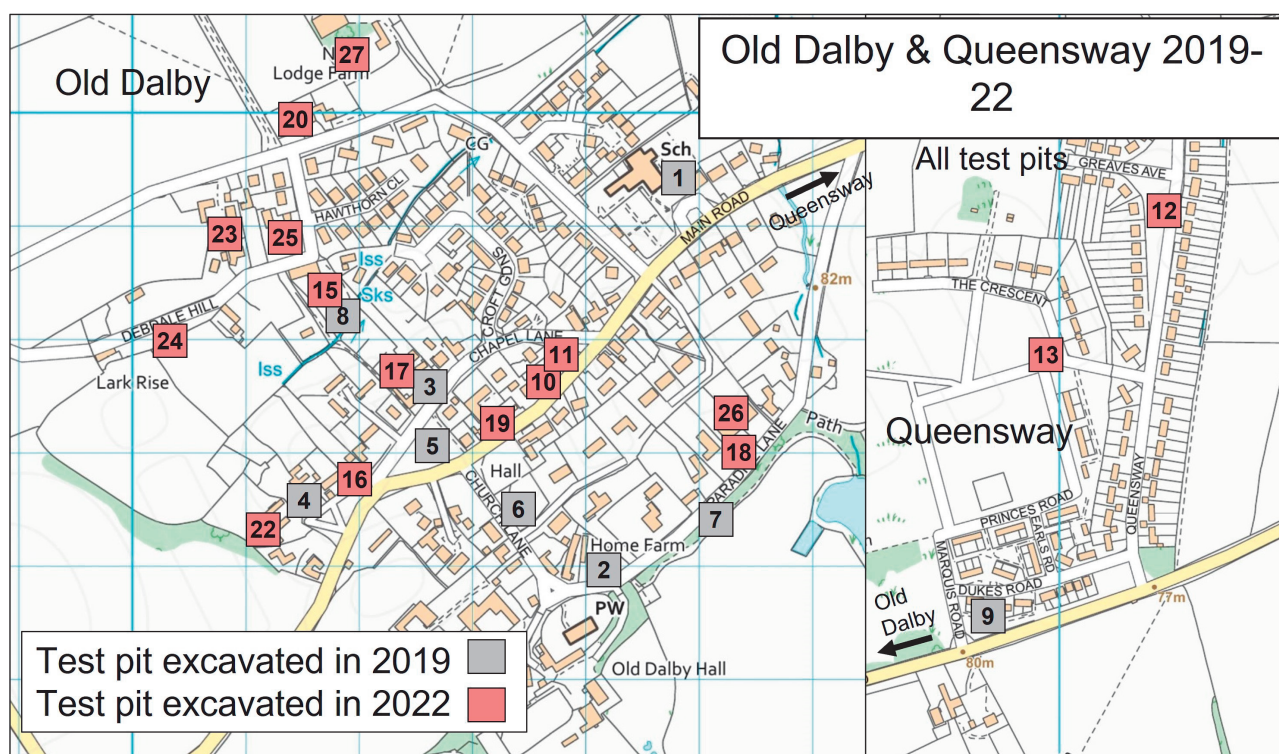


Figure 14 Map of Old Dalby, Leicestershire, showing the approximate locations of the test pits excavated in 2022 (map © Ordnance Survey) (C. Lewis).

inhabited even earlier. The lack of finds around the periphery of this dune illustrates the significance of the landscape in settlement location. The presence of hunter-gatherer societies, meanwhile, was demonstrated by the notable discovery of a Neanderthal tool from the Middle Palaeolithic era in test pit 17. A much more recent demonstration of the close link between industry and landscape was beautifully illustrated by the long spoon auger, a tool used in clog-making, that was found among the foundations of a nineteenth-century farmhouse (No. 6).

Poland

No further test pit excavations were carried out in Poland in 2022 as all planned/funded work for the CARE project in Poland was completed in the preceding years.

United Kingdom (C.L.)

Old Dalby and Queensway (Leicestershire) ($52^{\circ} 48' 25''$ N; $1^{\circ} 00' 07''$ E)

In 2022, sixteen test pits were excavated in Old Dalby and Queensway (Fig. 14), adding to the nine excavated in 2019 (Lewis *et al.* 2020, 90–91) before the COVID-19 pandemic prevented further excavations in 2020 and 2021. This brings the total number of pits excavated in Old Dalby over the two years to 25. Attention in 2022 focussed on areas not investigated in 2019, including the centre of the present village along Chapel Lane, the east end of Paradise Lane, and the northern part of the existing village where a single test pit, in the garden of the present pub, produced the earliest pottery in 2019 (Lewis *et al.* 2020, 90). Although there remain some areas where test pits have not been excavated – the

(mostly recent) north-east of the village and the area south-west of the church – some useful observations can be made about the development of the settlement.

No pottery predating the later Anglo-Saxon/Scandinavian period (ninth to eleventh centuries) has been found in any of the test pits in Old Dalby or Queensway. We can thus infer that the present settlement did not develop on the site of a Romano-British predecessor. Three test pits produced pottery of later Anglo-Saxon/Scandinavian date (mid-ninth- to mid-eleventh-century). Two of these (ODA22/15 and ODA22/17) were in the centre of the present village near the existing pub, in the same area where test pit ODA19/08 produced Stamford Ware in 2019. It seems likely that this area, close to a north-south-orientated footpath running through the village, was the earliest core of the medieval settlement. It is notable, however, that a small number of test pits in other areas of Old Dalby have also produced one or two sherds, possibly suggesting a dispersed pattern of settlement at this time. One of these was on the eastern edge of the present settlement near the school (two sherds), another along Paradise Lane north-east of the present church and eighteenth-century hall (one sherd), although the latter single find may relate to arable manuring.

Pottery dating to the high medieval period (twelfth to fourteenth centuries) was found in seven pits in 2022, but five of these produced only single sherds, likely at this date to relate to arable manuring rather than habitation. Overall, the high medieval settlement seems to have been focussed in two nodes, one near the pub (although, unusually, this seems to be smaller in extent than it was in the late Anglo-Saxon period) and the other along Paradise Lane. The evidence from the test pits for habitation on the north-western side of Paradise

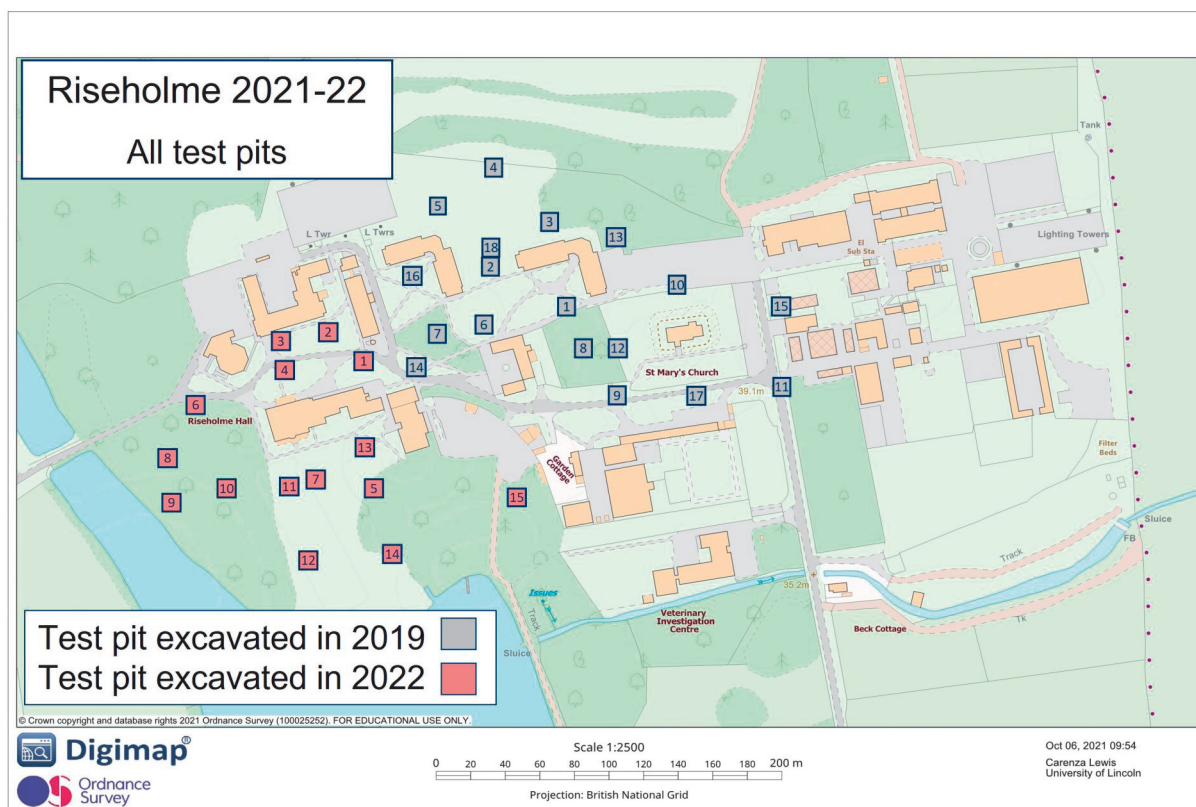


Figure 15 Map of Riseholme, Lincolnshire, showing the approximate locations of the test pits excavated in 2022 (map © Ordnance Survey) (C. Casswell and C. Lewis).

Lane complements the earthworks of deserted medieval settlement remains on the other (south-eastern) side of Paradise Lane, thus the test pits both provide a date for this area of settlement and suggest that it was larger than has previously been known from the earthwork survey. It seems likely to have been a new extension/foundation in the Norman period, given that only a single sherd was found predating the twelfth century. It is tempting to infer that the extension of settlement into this area may have been associated with the foundation of the Hospitaller preceptory in 1206 (Hoskins and McKinley 1954), whose earthworks lie nearby in the same field.

For the later medieval period, the amount of pottery post-dating the fourteenth-century demographic decline is greater at Old Dalby than that for the high medieval period. All three pits along Paradise Lane produced habitative amounts of pottery, with smaller amounts from the pits in the centre of the village near the pub, suggesting that the latter area may have contracted at this time while the former did not. This is also the period when, for the first time, pottery is found in test pits along Main Road and along Chapel Lane – these two streets run either side of an oval area likely to be a former green. We can infer that overall the village increased in size at this time, probably after replanning established the new ‘Main Road’ street, where previous excavation in advance of development discovered ditches, post holes and gullies containing stratified pottery dating from the twelfth to fourteenth centuries (Parker 2005). It is tempting to speculate that the presence of the Hospitaller preceptory, located just outside the present village south of Paradise Lane, may

have increased the resilience of Old Dalby to contraction during a period of widespread settlement contraction by attracting visitors and providing diverse sources of revenue.

The preceptory at Old Dalby was suppressed in 1540 during Henry VIII’s dissolution of nearly all monastic establishments in England (1536–41): this period sees a stark change in secular settlement at Old Dalby. Test pits along Paradise Lane (nearest the preceptory site) produced no pottery definitively dating to the mid-sixteenth or seventeenth centuries, suggesting that this was when this area, and the adjacent area surviving as earthworks, were deserted. Likewise, test pits near the pub, the oldest core of the village according to test pit data, also produced no pottery of this date, with the settlement in the mid-sixteenth and seventeenth centuries appearing to lie exclusively along Main Road and Chapel Lane: the most recent parts of the village, established after the fourteenth century.

Riseholme (Lincolnshire) (52° 48' 25" N; 1° 00' 07" E)

In September 2022, more than 50 University of Lincoln students took part in a second season of test pit excavations around the deserted medieval settlement of Riseholme. Fifteen test pits were excavated in 2022, adding to the eighteen excavated in October 2021 (Lewis *et al.* 2022a, 63–64: incorrectly noted on p.64 as having been excavated in 2022) to bring the total to 33. In 2022, the test pits were sited around the existing eighteenth-century hall (Fig. 15) which lies *c.* 200 m west of the church, which was the focus of test pit excavation in 2021. The excavations in 2022 aimed to

test the hypothesis that settlement of medieval date may have lain near the hall, as it was in this direction that larger amounts of pottery of this date were found in 2021.

Five of the 2022 test pits produced pottery of Roman date, all in the area nearer the former stream (now a lake) south and west of the existing hall, including two pits south of the hall (TP RIS/22/05 and 07) which produced more than would be expected from non-intensive activity such as manuring. Test pit 5 also produced a fragment of a silver bracelet of Roman date. It is reasonable to infer that there may have been a small habitative focus of Roman date in this area.

It was notable that more pottery of late Anglo-Saxon (mid-ninth- to mid-eleventh-century) date was found in 2022 than in 2021 (when just two pits produced a single small sherd each). In 2022, three test pits produced ten sherds of this date, with RIS/22/09, the westernmost pit excavated near the former stream, yielding four sherds representing three vessels from undisturbed pre-modern contexts. This is more than would be expected from non-intensive use and can be taken to indicate intensive activity such as settlement nearby. The other two pits producing pottery of ninth- to eleventh-century date (RIS/22/01 and 06) were both located within *c.* 20 m of the later hall. We inferred that this might indicate a pre-Norman core of habitation in the areas north and west of the hall. Importantly, the ninth- to eleventh-century pottery assemblage from the 2022 test pits is the first evidence for medieval settlement of pre-Norman date found anywhere in Riseholme, and as such is of some significance, especially given its location on the opposite side of the stream (now lake) to the known medieval settlement site which now survives as earthworks (Everson *et al.* 1991; Thompson 1960).

More pottery of high medieval date (twelfth- to fourteenth-century) was found than in 2021, with three sherds of twelfth- to thirteenth-century date and 31 sherds of thirteenth- to fourteenth-century date recovered from nine of the fifteen pits excavated in 2022. Pits with more than a single sherd (RIS/22/02, 04, 05, 06, 07 and 09) were all located around the hall, suggesting that there was a node of settlement in this area: this appears to have extended not only across broadly the same areas north and west of the hall as in the ninth to eleventh centuries, but also south of the hall, i.e. immediately north of the stream/lake. The 2022 test pit evidence indicates that the pre-Norman settlement north of the stream/lake continued in existence in the high medieval period, when the known medieval settlement site south of stream/lake was also in existence. Given the record of five holdings at Riseholme in Domesday Book, with three surviving to at least 1166, the presence of two discrete areas of settlement, either side of the then stream, is not implausible. The assemblage is predominantly locally produced in Lincoln, the only regional import being a sherd from an internally- and externally-glazed Beverley 2-type jug of thirteenth- to mid-fourteenth-century date.

For the later medieval and early post-medieval periods, considerably less pottery was found, supporting previous inferences that the settlement was severely affected by demographic decline after the fourteenth century. From all fifteen pits, just four small sherds from two Cistercian ware cups and a Midlands Purple

ware jug or jar are the only late medieval/transition period finds, all likely to date from the mid/late fifteenth to mid-sixteenth centuries; only two sherds of post-medieval pottery pre-date the early eighteenth-century construction of the present hall, one of which is from an imported German stoneware mid-sixteenth- to seventeenth-century Frechen-type drinking jug. Overall, the assemblage supports the inference of a gap in occupation in this part of the settlement landscape from the late fourteenth century which extended until the present hall was built in the early eighteenth century.

Review and summary 2019–23

The CARE-MSoC project aimed to involve members of the public in excavating archaeological test pits within historic rural settlements in the Czech Republic, Netherlands, Poland and UK. It ran from 2019–2023. The project faced many, many obstacles, restrictions and delays. We had expected those caused by the inevitable challenges of introducing a type of archaeological activity (public participatory research excavation) which was entirely new to the non-UK states, but we did not anticipate the extreme and unprecedented disruption caused by the COVID-19 pandemic, which repeatedly made fieldwork impossible for months on end in all four states. In spite of these challenges, 298 test pits were excavated by *c.* 1,200 members of the public, most of whom were residents of the settlements in which the excavations took place. The number of pits excavated (at the time of writing) was 99% of the planned target (300), and the number of settlements investigated (fifteen) significantly exceeded the target of twelve.

Analysis of the archaeological data was ongoing in summer 2023 (when some additional test pits may be excavated), and plans are in hand for a synthesising comparative overview of the results for publication, which will include an assessment of the new insights into medieval settlement development gained from the archaeological discoveries, as well as an analysis of the social impact of the project on individuals, communities and the wider heritage sector.

In the meantime, the outcomes of the test pit excavations in 2019–23 are summarised very briefly in the synthesis below of provisional ‘thumbnail’ sketches of the key new insights and evidence for the development of rural medieval settlements from the test pit excavations published in *MSR* each year, in order to bring together insights and offer a flavour of what has been achieved, in advance of final, more detailed publication.

In the Czech Republic, test pitting explored five villages. In Drvátovice (reported in *MSR* vol. 37), a hamlet near Vanovice where more extensive test pitting took place, just two test pits were excavated. These pits, while revealing a large assemblage of middle Bronze-Age pottery, produced none relating to medieval occupation which is documented from 1256, leaving open the question of its medieval origins and development. In Merboltice (reported in *MSR* vols 37 and 38), by contrast, excavation of 25 test pits not only revealed the baroque church destroyed during the communist era, but also showed the village to have originated in the thirteenth/fourteenth or fifteenth century, when it extended along the entire length of the stream valley it currently occupies, with the present

layout developing by infilling between a series of medieval farms originally separated by greater distances. In Myslinka (reported in *MSR* vols 35 and 36), test pit data showed that the currently occupied settlement was established on a new, previously unoccupied site in the later eighteenth century, after the medieval settlement (whose location remains unproven) was abandoned during the religious wars of the sixteenth/seventeenth century. At Předhradí-Rychmburk (reported in *MSR* vols 36 and 37), test-pitting of an area of settlement within the fourteenth-/fifteenth-century fortified castle bailey produced no finds earlier than the sixteenth century, but showed how extensively this area has been modified in recent times; possible factors contributing to the lack of recovered finds of earlier date include the removal of earlier deposits, or the presence of re-deposited material impeding access to earlier deposits. In Vanovice (reported in *MSR* vols 36 and 37), test-pitting revealed widespread Bronze-Age and Iron-Age activity, and indicated that the early medieval settlement consisted of several small, dispersed hamlets, which became concentrated around the parish church in the twelfth to early thirteenth centuries, and only later acquired a regular planned layout.

In the Netherlands, seven settlement territories were involved in the CARE test-pitting programme, although in several of these the pandemic prevented many test pits from being excavated. In Aarle (reported in *MSR* vol. 35), just four pits were excavated, with medieval finds limited to later (fifteenth-century) pottery from only one pit. However, the test-pitting did usefully demonstrate the potential of deposits of greater depth for producing earlier material, although post-pandemic social changes made it impossible to return as planned to investigate these. At Boxtel (reported in *MSR* vol. 38), nine test pits usefully ground-truthed prior theories about the development of the settlement, dating the central part of the town to the high medieval period and showing that the nearby Strijpt area was used as arable land in the eleventh and twelfth centuries before the market was founded. In Esch (reported in *MSR* vol. 38), the excavation of just three test pits raised the possibility that the documented fifteenth-/early sixteenth-century farmstead may not have been in the same place as the 1604 manor, highlighting the need for further work to test this inference. In Gemonde (reported in *MSR* vols 35 and 38), test pitting demonstrated the presence of a Roman villa which continued into the seventh century, and showed that medieval habitation took the form of a number of dispersed farms and small settlement clusters, with some farms of medieval origin and others apparently later. In Liempde (reported in *MSR* vols 35, 37 and 38), test pitting showed that the nucleated village developed from an agglomeration of hamlets, which originated as dispersed farms set amidst their arable fields, but suggested no direct link between the medieval settlement and the Late Roman or Merovingian period – although Iron-Age and Roman finds have previously been made at various sites in the surrounding open fields. In Schijndel (reported in *MSR* vol. 38), excavation of 21 pits showed the late medieval settlement to have been arranged along the main road, which may date from as early as the Carolingian period (eighth to ninth centuries), possibly with roots in land use in the Roman and even Iron Age periods. In Woensel (reported in *MSR* vol. 35), six test pits in what

appears at first glance to be an entirely modern suburb showed habitation in the centre of the present settlement to date back to the Carolingian period, with a single sherd of Merovingian pottery from a different test pit hinting at the possibility that this resulted from settlement shift between the Merovingian and Carolingian periods; in contrast, habitation at an outlying historic farmhouse was dated at least as far back as the sixteenth century.

In Poland, excavation of fifteen test pits in Biadki (reported on in *MSR* vol. 37), in three different parts of the current settlement, produced no pottery predating the seventeenth century, usefully indicating which parts of the settlement first documented in the sixteenth century might be the earliest, but raising the possibility that the historic settlement was not founded on a medieval predecessor. In Chycina (reported in *MSR* vol. 35), excavation of twelve test pits in the central square or green revealed extensive Bronze-Age land use and showed that the village green, hitherto presumed to have always been open, was intensively used from the thirteenth century onwards, possibly initially for habitation and then in the sixteenth to eighteenth centuries for rubbish pits. In Sławsko (reported in *MSR* vol. 36), excavation of thirteen test pits produced a relatively large assemblage of Bronze-Age/Early Iron-Age pottery and showed that the medieval settlement may have existed in 1300–1600 as a nucleus near the church, and then developed after 1600 by extending along a central street running up the valley.

In the UK, where many medieval settlements have benefitted from test pit excavation before the CARE project began (e.g. as reported in *MSR* vols 20–34), and where the CARE excavations were carried out primarily to provide social impact data, the test pit excavations nonetheless provided new insights. At Old Dalby (reported in *MSR* vols 35 and 38), 24 pits indicated that the settlement developed from one or more small pre-Norman nuclei into two or three small nodes in the high medieval period, and bucked national trends by expanding after the demographic collapse of the fourteenth century, probably helped by the presence of a preceptory whose sixteenth-century demise heralded severe contraction and replanning of the village. At Riseholme (reported in *MSR* vols 37 and 38), 33 test pits provided the first evidence from this well-known deserted settlement excavated in the 1950s for medieval activity predating the thirteenth century and hints of pre-Norman settlement.

The paragraphs above offer very short summaries of key points in complex narratives, but even these point to the emergence of wider cross-cutting themes, within and across different nation states. These include new evidence for pre-medieval settlement and land use; the impact of pre-medieval activity on the development of settlement and land use in the medieval period; the origins and development of the nucleated village; the origins and development of dispersed patterns of settlement and farms; the ways in which one form of settlement develops into another; the impact of landscape, agricultural regime and catastrophe (pandemics, warfare, climate change); the development of village greens and plot frontages; the role of communication, industrialisation and political factors on settlements; the archaeological potential of currently occupied rural settlements; and the impact of modern

development (since AD 1900) on the archaeological resource. These themes will be amongst those explored in more detail, along with site-by-site analyses, in the final publication.

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