



Universiteit
Leiden
The Netherlands

Verleden als leidraad: ijzertijdbewoning en landschapsinrichting in noord-oostelijk Noord-Brabant in verleden én heden

Jansen, R.

Citation

Jansen, R. (2021, September 15). *Verleden als leidraad: ijzertijdbewoning en landschapsinrichting in noord-oostelijk Noord-Brabant in verleden én heden*. Retrieved from <https://hdl.handle.net/1887/3210297>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/3210297>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <https://hdl.handle.net/1887/3210297> holds various files of this Leiden University dissertation.

Author: Jansen, R.

Title: Verleden als leidraad: ijzertijdbewoning en landschapsinrichting in noord-oostelijk Noord-Brabant in verleden én heden

Issue Date: 2021-09-15

An Iron Age settlement landscape neighbouring the Ha C chieftains' graves at the Maashorst (N.-Br., The Netherlands)¹

Citizen science research of the sites Vinkel-Munnekens Vinkel and Heesch-McDonald's²

Richard Jansen & Paul van den Helm

Keywords: Iron Age, settlement landscape, Citizen Science, chieftains' graves

Introduction

The Ha C chieftains' graves at the Maashorst are part of an extensive barrow landscape. The cemeteries of Oss-Zevenbergen and -Vorstengraf have a deep history starting in the Late Neolithic and Bronze Age till the end of the Early Iron Age (c. 2300-500 BC). Based on excavations we know that for centuries this area was exclusively used for burials (Van der Vaart-Verschoof this book; Van der Vaart-Verschoof 2017; Fontijn, Van der Vaart & Jansen 2013; Fokkens, Jansen & Van Wijk 2009). Less is known about the associated and contemporaneous settlements. The area north of the barrows was extensively researched with trial trenches, but no late prehistoric habitation was found. This low-lying and relatively wet area probably had a ritual meaning based on the find of a deposited bronze axe here (Jansen & Fokkens 2007).

The settlements were probably located south of the mounds, higher on the Maashorst-plateau. However, only one of the Iron Age settlements known within a distance of 5 km of the chieftains' graves has been excavated. Two other sites – Vinkel-Munnekens Vinkel and Heesch-McDonald's – were partially excavated by amateur-archaeologists.³ These latter two sites are presented here and integrated

1 This article is the result of an master thesis project (Van den Helm 2017).

2 Citizen science is a relatively new term within archaeology, originating from other scientific disciplines. However, generally defined as scientific research that is (partly) conducted by non-professionals or amateurs the excavations published here can be considered 'citizen science'. The scientific work is undertaken by local amateur-archaeologists, in the case of Munnekens Vinkel in collaboration with a scientific institute.

3 Amateur-archaeologists are also referred to as local archaeologists because their knowledge generally goes beyond the status of amateur. Their local knowledge is important for regional inventories, not only detector and surface finds but also small-scale excavations and observations.

into a regional overview of the Iron Age settlement landscape neighbouring the Ha C chieftains' graves at the Maashorst. It is a primary step in answering the question: where did the 'chieftains of Oss' live?

The Maashorst-region

Late prehistoric settlements are not situated randomly within a landscape. The physical characteristics of the environment, as well as the cultural landscape, are important factors in the late prehistoric settlement dynamics. In this paragraph, the geogenesis of the area, as well as the topography of the Iron Age landscape of the Maashorst-region, are shortly outlined.

The physical landscape

The following paragraph is based on Jansen & Van der Linde (2013). The Maashorst forms the northern part of the Peel Blok-plateau. This plateau is approximately 10 to 15 km wide and still gradually moving upward due to tectonic forces (Van Mourik 1987) (fig. 1). It was predominantly formed in the Early and Middle Pleistocene under the influence of tectonics and the river Meuse (Dutch: *Maas*). During warmer phases in the last Ice Age, at the end of the Pleistocene,

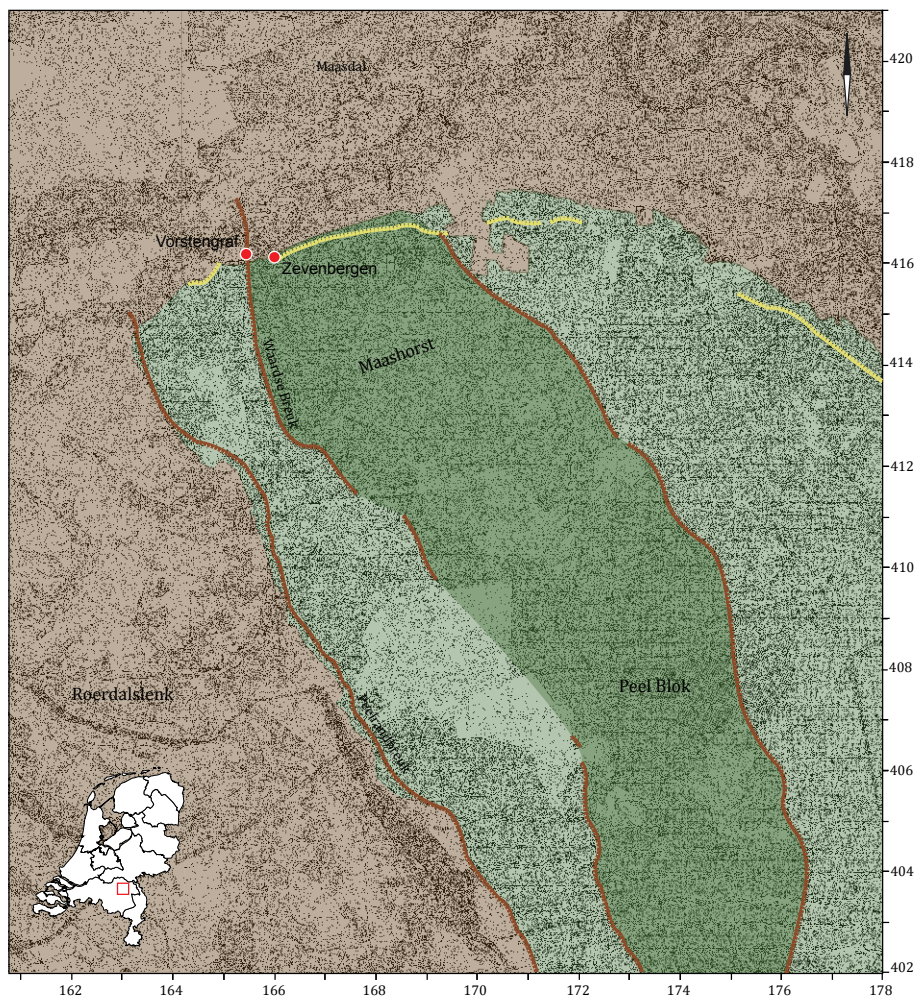


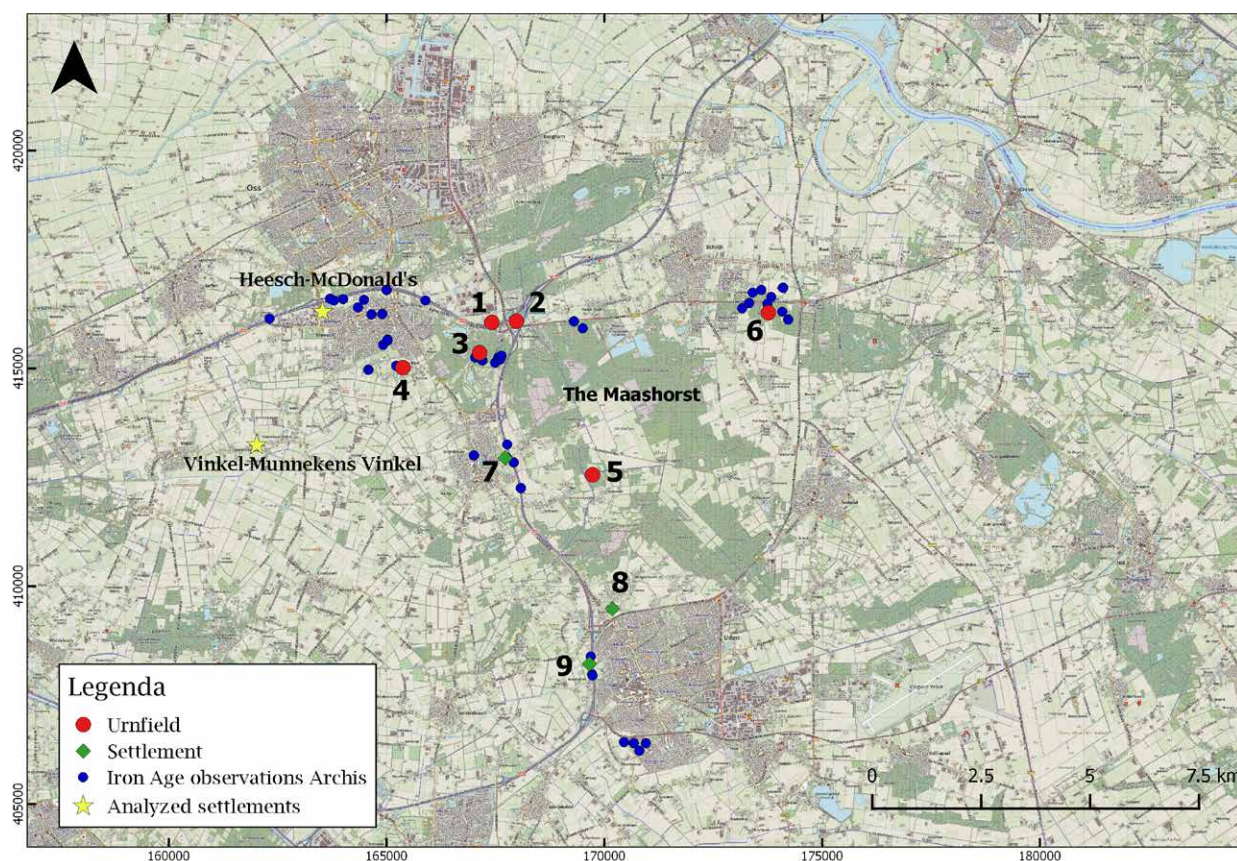
Figure 1. The Ha C chieftains' graves of Zevenbergen and Vorstengraf lie at the northern flanks of the Maashorst-plateau. The contemporaneous Iron Age settlements lie south of the cemeteries, some higher on the plateau and nearby sand ridges (drawing R. Jansen & P. van den Helm).

wide and shallow valleys were eroded on the edges of the Maashorst. Through these valleys, surface water flows in relatively small streams to the Roerdalslenk in the west and the Maasdal in the north. The edges of the Maashorst are also characterised by so-called *wijstgronden*, influenced by the presence of the faults. Here the obstruction of the natural flow of ground water by different mineral depositions on the fault planes causes the seepage of groundwater. Especially these ridges were highly valued by farming communities from the Late Neolithic onwards (Van den Helm 2017; Jansen & Van der Linde 2013).

Topography of the Iron Age landscape

During the years of research at Vorstengraf and Zevenbergen, one of the intriguing questions was where the chieftains had lived. An extensive test-trenching campaign was executed north of the Vorstengraf of Oss. Within an area of 80 ha, more than 3 km of small, parallel prospective trenches were excavated, revealing that the area had never been used for habitation in later prehistory. The relatively low-lying area was too wet for habitation (Jansen & Fokkens 2007; see also De Kort 2002). During the whole research, only one prehistoric object was found in the area. Some 300 m northwest of the Vorstengraf of Oss a bronze axe was found within a zone of springs (Fontijn, Jansen & Fokkens 2004; Jansen & Fokkens 2007). This fits a generally known picture in which the wetter parts of the landscape were explicitly used for depositions (Fontijn 2002).

Figure 2. Iron Age settlements at the Maashorst. 1: Vorstengraf; 2: Zevenbergen; 3: Vorssel; 4: Hoge Wijnst; 5: Slabroekse Heide; 6: Gaalse Heide; 7: Nistelrode-Zwarte Molen; 8: Uden-Noord; 9: Uden-Schouwstraat (drawing R. Jansen & P. van den Helm). A complete list of sites and data can be found in Van den Helm 2017 (MA thesis University Leiden).



A small regional survey indicates that a number of Iron Age settlements, represented by surface finds, are situated south(west) of the cemeteries Zevenbergen and Vorstengraf. Especially the northern and western edges of the plateau were extensively inhabited in later prehistory (Jansen & Van der Laan 2011).

The nearest settlements lie directly south, close to another group of mounds at the Vorssel (fig. 2 & 3). Surface finds, especially sherds, indicate the presence of a Bronze and Iron Age settlement. A few small trenches were excavated here and they brought some Bronze Age and Roman Period features to light.⁴ Some 250 m to the west a second (possible) Bronze/Iron Age settlement is known. Here surface finds were collected on different occasions. Also at several other locations, Iron Age ceramics were found, including a number of locations north of Heesch.⁵ These observations suggest a distribution of sites that not only roughly follow the edges of the Maashorst-plateau but also the outline of a sand ridge west of the Maashorst.

Within a wider area, more sites are known of which one is partly excavated: Nistelrode-Zwarte Molen. Here, several Early and Middle Iron Age house plans and corresponding structures have been found (Van Hoof 2008; Hensen & Janssens 2016). (Early) Iron Age house plans and/or other structures are also found at Uden-Noord and -Schouwstraat (Goossens & Meurkens 2013; Van Hoof & Jansen 2002). Both sites are, however, at an even greater distance from the chieftains' graves.

Two additional sites are worthwhile mentioning: Vinkel-Munneken Vinkel and Heesch-McDonald's. Both sites have been excavated by amateur-archaeologists already in the 1990's but were never published. The sites are discussed here briefly. Despite the rescue-character and small scale of the research, the data is important given the limited knowledge of Iron Age habitation in this area. By publishing both sites we also want to emphasize the added value of such excavations for scientific research. Looking back, we can consider these investigations *citizen science avant-la-lettre*.

The Iron Age site Vinkel-Munneken Vinkel

Introduction

In 1995, in the context of a sand extraction in the township Munneken Vinkel, excavators encountered several archaeological finds. Amateur archaeologists were informed and started to record and document the archaeological relics as good as possible. With the help of some students from Leiden University, they were able to document some of the archaeological information before it was destroyed (fig. 3). Amongst others, they excavated and documented five wells and a cluster of postholes that was interpreted as a house plan.

The site of Munneken Vinkel is situated west of the Maashorst-plateau on a small sand ridge that is relatively higher compared to the surrounding area. The site was known since the 1970s. During the construction of a gas main in 1972, approximately 30 postholes and Iron Age sherds were reported by members of

4 This research was part of a RCE-project, in which archaeological monuments documented in Archis II all over the Netherlands were prospected (RCE internal report).

5 For an overview see Van den Helm 2017. Most sites are recorded in Archis 3: the national database of archaeological sites in the Netherlands.

Figure 3. The 'excavation' in 1995 had to be carried out under difficult circumstances (photo G. Smits).



the local historical association (Dutch: *heemkundekring*) of Heesch.⁶ Based on this, the terrain was assigned as a high valued archaeological site.⁷ The presence of an (Iron Age) settlement was established in 1980 when during the demolition of a stable approximately 400 Iron Age sherds were found, together with some Late Medieval pottery.⁸

Finally, in 2003, a small trial trench was dug south of the sand extraction area because of the building of a house (Loopik 2013). Although not much data was gathered, only a few postholes, it is an important observation for determining the outer limits of the settlement area (fig. 4).

Wells

During the sand extraction, there was the opportunity to document five wells in which 602 fragments of Iron Age pottery and 57 fragments of Roman pottery were found (tab. 1). Three wells contained a wooden construction or parts of a (demolished) construction.

House plan?

In the northern part of the area, a cluster of postholes was recognised which closely resembled a house plan (fig. 3). Some of the postholes contained Iron Age sherds but unfortunately, it is not clear which sherd came from which posthole. Because of the incompleteness of the plan and the fact that most likely not all features could be drawn and excavated, it is impossible to describe the plan in detail. The tentative house plan, or even the features itself, are however a clear indicator for a settlement.

⁶ Archisnumber 36056 and 36057; see also Loopik 2003, 7.

⁷ AMK-terrein 4703. Despite this 'label' the site still could be destroyed by the sand extraction project.

⁸ Archisnumber 14315; see also Loopik 2013, 7.

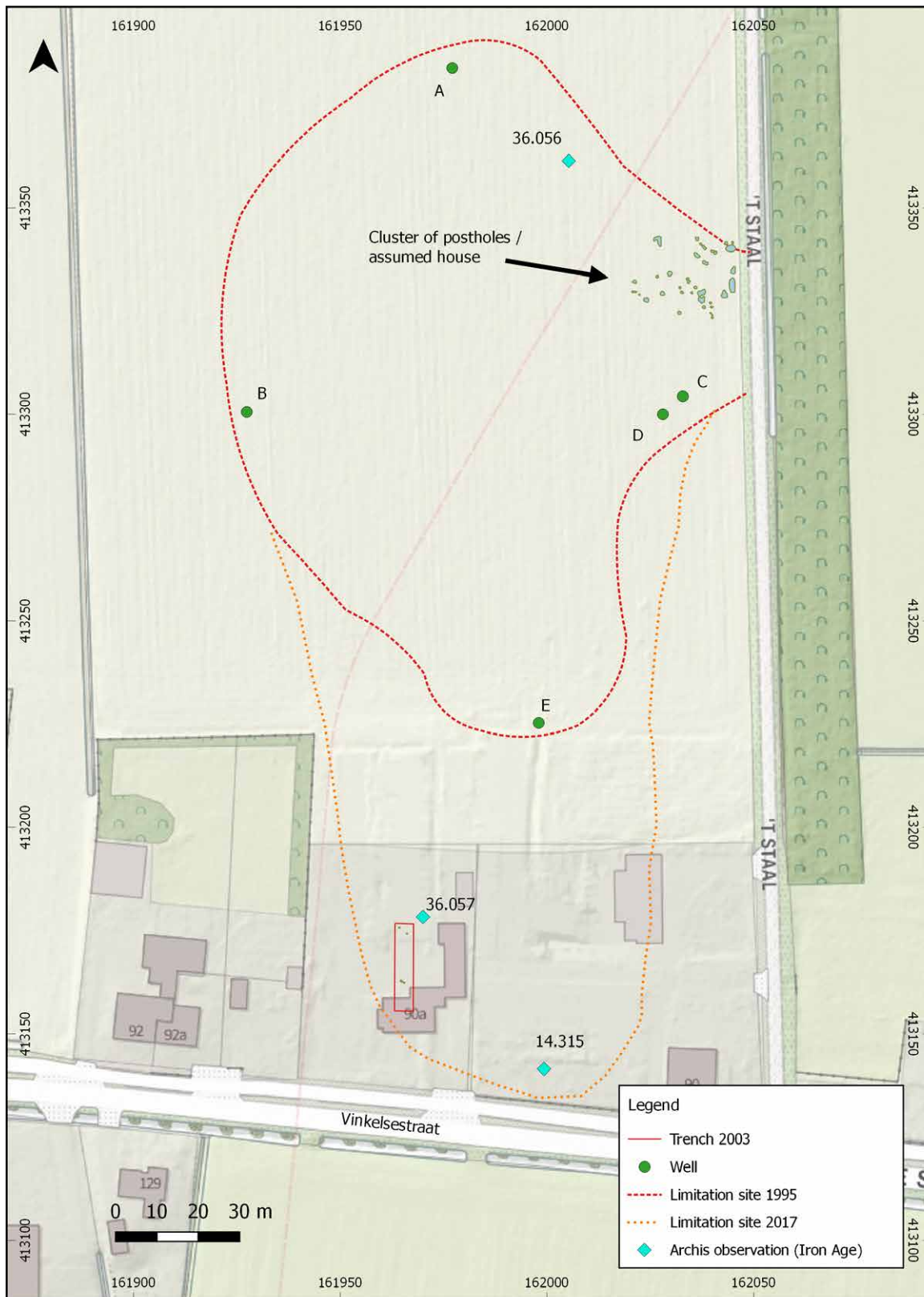


Figure 4. Overview of the archaeological features at Vinkel – Munnekens Vinkel based on the drawings of G. Smits, the excavated trench (Loopik 2013) and Archis observations (drawing P. van den Helm).

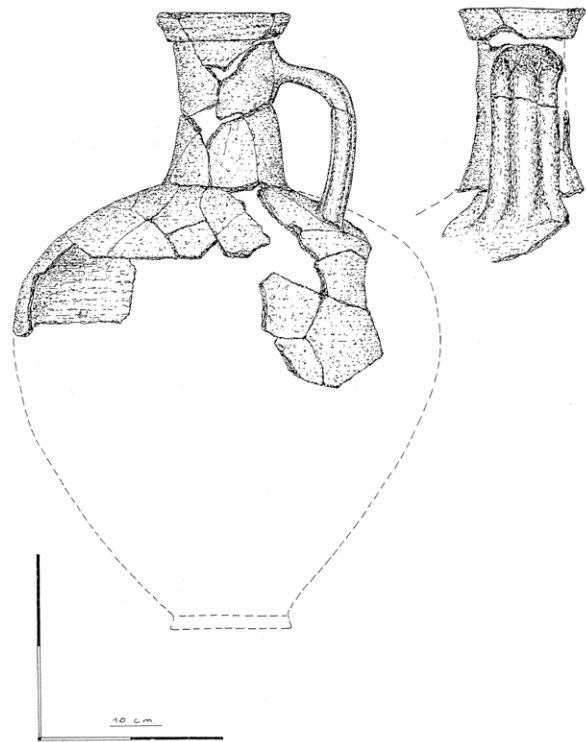


Figure 5. Roman period jar from water well A. The descriptions and high-quality drawings of the ceramics made by G. Smits were very helpful in the interpretation of the site (drawing G. Smits).

Well	Dimensions of the pit	Construction	Finds	Date
A	maximum excavation depth of 150 cm	wooden construction of oak beams placed vertically	ceramics, soil sample containing ceramics, charcoal, a pea and burnt bone, fragments of tephrite	Middle Iron Age; phase G-H (375-250 BC)
B	maximum excavation depth of 160 cm QW	large, pointed beams of oak vertically placed with a horizontally placed wooden revetment with traces of sods used for the construction	almost complete Roman jar (150 AD: Hiddink 2010, 141) and sherds of amphora (whole Roman period: Hiddink 2010, 201), (decorated) Iron Age/Roman period ceramics	Late Iron Age/ Roman period (250 BC-150/200 AD)
C	dimensions unknown	construction unknown	ceramics (mostly undecorated)	Iron Age
D	maximum excavation depth of 130 cm, 180 cm wide	no visible construction, remains of possible wood and sod construction	ceramics (decorated and undecorated), coastal pottery, fragments of burned bone (human or animal)	Iron Age
E	maximum excavation depth of 190 cm	no visible construction, remains of pointed wooden beams	Iron Age ceramics; Roman period ceramics, Roman jar (Early 2nd century AD (Hiddink 2010, 129) (fig. 5)	Iron Age/Roman period

Table 1. Characteristics of the five wells excavated at Vinkel-Munneken Vinkel (A-E).

Finds

The most common group of artefacts consists of Iron Age and/or handmade Roman period ceramics, found in the wells, in some of the other features or as loose finds (fig. 6). One complex could be dated more precisely. The tens of sherds of well A can be dated to the second half of the Middle Iron Age, phase G-H (375-250 BC).⁹

A few soft pink coloured sherds can be interpreted as so-called coastal pottery (Dutch: *kustaadewerk*). This was used for the production and transportation of salt, which was an important trade item from the Early Iron Age onwards (Van den Broeke 2005b, 514-515). One fragment was part of a form that can be dated to the Early Iron Age. Finally, two spindle whorls and eight fragments of tephrite were found, usual artefacts in an Iron Age settlement.

⁹ Personal communication P. van den Broeke. See also Van den Broeke 2005a.

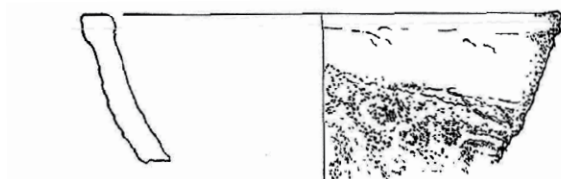
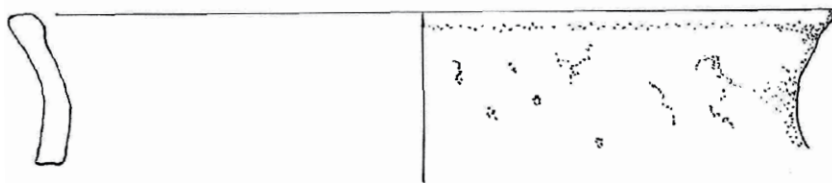


Figure 6. A selection of Iron Age sherds from Munneken Vinkel (drawing: P. van den Helm).

A pea

Pisum sativum

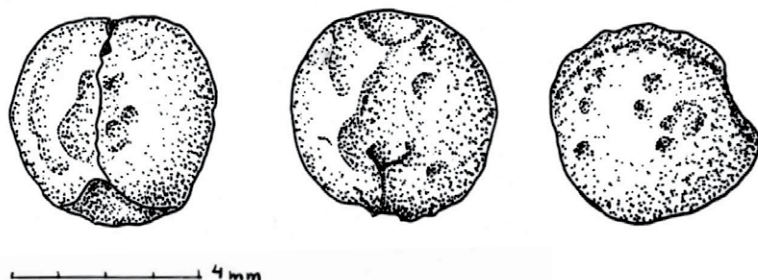


Figure 7. A complete carbonised seed from a pea from Vinkel-Munneken Vinkel (drawing: P. van den Helm).

A special find was a carbonised seed of a pea. It was found after sieving a soil sample from well A, together with some small fragments of ceramics, charcoal, fragments of burnt bone and fragments of tephrite (fig. 7). Because the well also contained dozens of sherds it could be dated to the second half of the Middle Iron Age (phase G-H).

The pea is a commonly grown crop plant from the Early Neolithic onwards although traces of seeds are scarce or for some periods even absent (Bakels 2009, 30; 100; 112). Munneken-Vinkel is one of a few (Middle) Iron Age sites where a seed of a pea is found, indicating that peas were part of the local subsistence economy here.

Conclusion

When we combine the data of the different investigations, a picture emerges of an extensive settlement area situated on a well-thought-out location. Thanks to the effort of some amateur-archaeologist only the location of the site was recorded, which was confirmed by a later professional research. Additionally, we also have some information about the dating and character of the site.

The large amount of Iron Age and (Early and Middle-)Roman pottery indicates a deep history of the settlement. Iron Age and Roman period farmers have lived and worked here for many generations. Munnekens Vinkel is a permanent settlement location although continuous habitation throughout the whole period – Iron Age till 2nd century AD – is difficult to establish.

The Iron Age site Heesch-McDonald’s

Introduction

At the northwestern part of the town of Heesch, the construction of a McDonald’s restaurant in 1994 led to a rescue excavation by local archaeologists L. Ceelen and H. Pennings. They managed to collect some of the archaeological finds and were even able to draw a part of the archaeological features. Most of the finds can be dated in the Iron Age and Middle Ages. Besides pottery, they found clusters of features including a large row of small postholes. The site is situated on an extensive sand ridge northwest of the Maashorst plateau on which the present day town of Heesch is also situated.

House plan and rows of postholes

Within the cluster(s) a part of a house plan, several additional buildings and a large double row of postholes were recognised (fig. 8). The documented part of the house plan measures a maximum of 10-15 meters. Because the house is not fully excavated a clear interpretation (typology and date) cannot be determined.

The rows of postholes run parallel to the orientation of the Iron Age house plan. The rows are interpreted as a palisade that possibly functioned as a boundary of the Iron Age settlement. Although suggestive, more or less identical rows of postholes were found close by at the Late Bronze-Early Iron Age site Uden-Noord and Early Iron Age site Rosmalen-Vindplaats 8 (Goossens & Meurkens 2013, 47; De Koning & Vaars 2003, 25-31). The palisades at these sites are interpreted as settlement and/or farmyard boundaries and/or for land division.

Finds

Here, the most common group of artefacts consists of Iron Age ceramics, found in some of the postholes of the outbuilding (fig. 8: numbers 106, 107, 108 and 109; tab. 2). A few fragments are decorated and some fragments have a smoothened surface, common for the Early and Middle Iron Age (Van den Broeke 2012, 133).

Table 2. Characteristics of the ceramics found in some of the postholes at Heesch-McDonalds.

Posthole number	Ceramics	Date
109	rim fragment of an open bowl with a relatively sharp edge (fig. 9)	Early – Middle Iron Age (Van den Broeke 2012, 46-50)
107	rim fragment; smoothened and polished	Early – Middle Iron Age (Van den Broeke 2012, 133)
106	small bottom fragment; ‘besmeten’	Iron Age

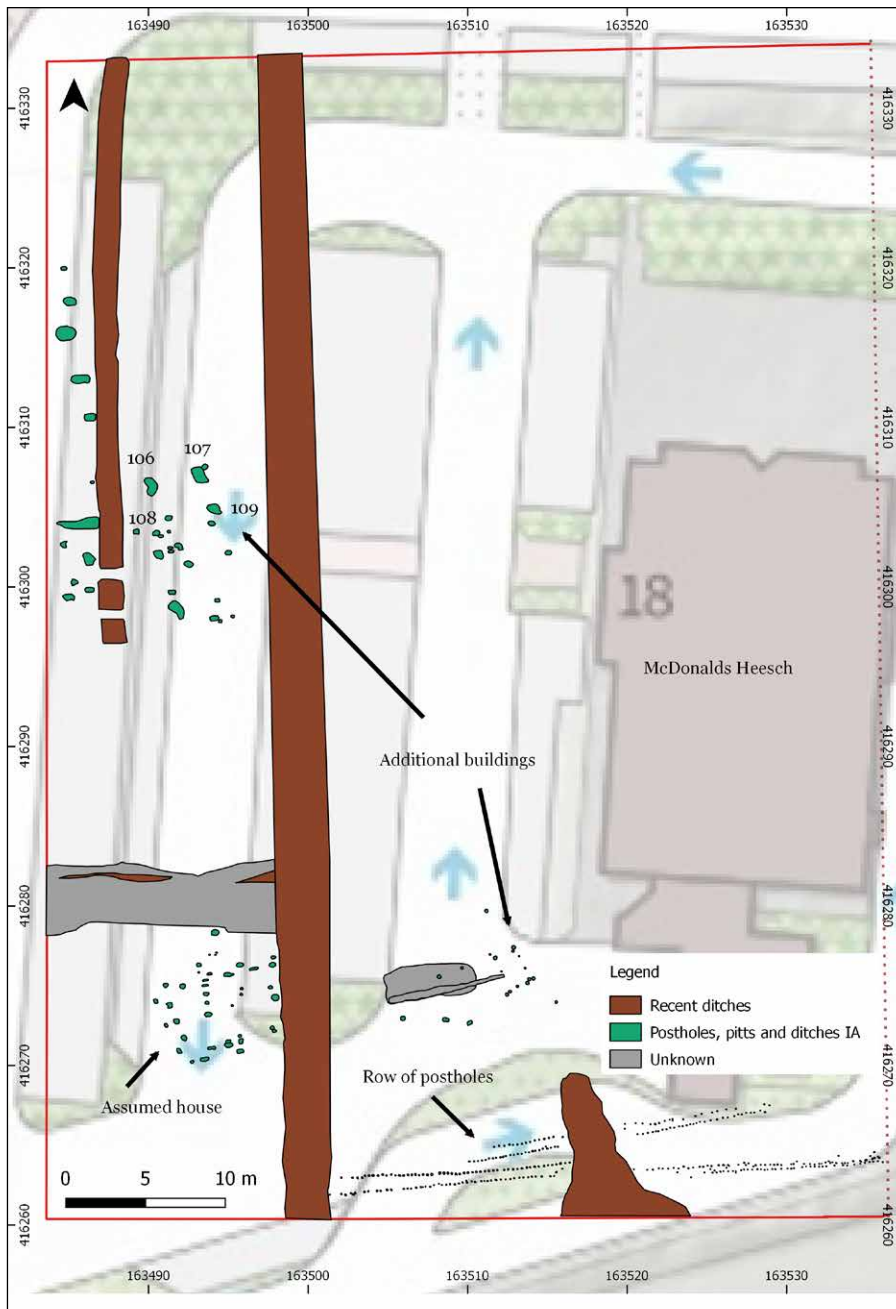


Figure 8. The archaeological features of the Iron Age settlement at Heesch-McDonald's. The numbers of the features containing pottery are depicted in the northwestern part of the map (drawing P. van den Helm after map by L. Ceelen and H. Pennings).

Conclusion

The analysis of the Iron Age settlement site Heesch-McDonald's, although the research was limited, confirms the importance of amateur-archaeologists. Without their efforts, the site would have been destroyed unnoticed.

The ceramics, the presence of a house plan and additional buildings and the rows of postholes, clearly indicates the presence of an (Early and Middle; 800-250 BC) Iron Age settlement. There are no indications for Roman period habitation; a re-use of the location occurs not earlier than the Late Middle Ages.

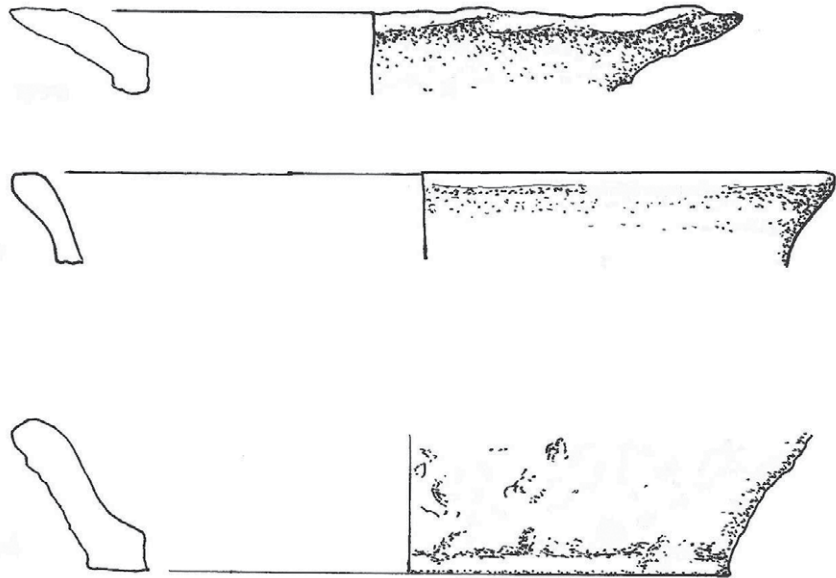


Figure 9. A selection of Iron Age sherds from Heesch-McDonald's (drawing P. van den Helm).

The rows of postholes are interpreted as a palisade demarcating the Iron Age settlement. Comparable structures are known from other Iron Age settlements in the region, especially from the Early Iron Age. The creation of boundaries is also not a (new) element in the late prehistoric topography, it occurs already from the Middle Bronze Age onwards. At the same time, it is not a common practice in all regions, which raises questions about their relevance and meaning within the context of (local) social and economic development (see for instance Løvschal 2015).

The Iron Age settlement landscape neighbouring the Ha C chieftain graves at the Maashorst

As said, the cemeteries of Oss-Zevenbergen and -Vorstengraf have a deep history. The oldest burials date to the Late Neolithic and Bronze Age, the latest to the Early Iron Age. In the last phase, three Ha C chieftains' graves were erected in the cemeteries (Van der Vaart-Verschoof this book; Van der Vaart-Verschoof 2017; Fontijn, Van der Vaart & Jansen 2013; Fokkens, Jansen & Van Wijk 2009). Research in the last 15 years focused on the deceased and related burial rituals, but where did these Iron Age farmers live? And where and how did the chieftains of Oss live?

The low-lying and wet area north of the barrow groups was not suitable for late prehistoric habitation. It seems the barrow groups Zevenbergen and Vorstengraf form a physical and even a mental 'boundary' at the edge of a territory from where the low-lying and uncultivated outlands could be overlooked. Within this territory, the contemporaneous settlements were situated south of the cemeteries, on the higher lying plateau and sand ridges of the Maashorst. Here, in the direct vicinity of the chieftain graves of Oss, several Bronze and/or Iron Age sites are known based on surface finds made by amateur-archaeologists. Three sites have been partially excavated; of which two by amateur-archaeologists. What can they tell us about the Iron Age settlement landscape?

Both sites give us a first glimpse of the character of the Iron Age landscape neighbouring the Ha C chieftain graves at the Maashorst, which so far seems very comparable to contemporaneous landscapes (for example Oss-Ussen and -North: Schinkel 1998; Fokkens, Van As & Jansen in prep.). To answer questions about the habitation location of the chieftains of Oss, this research is only a first step. We need to execute extensive excavations to establish whether the extraordinary appearance in death is also reflected in, for instance, a notable house plan or material culture in the settlements. Only then we can get an insight in the Iron Age settlement landscape neighbouring the Ha C chieftains' graves at the Maashorst.

Acknowledgments

With the publication of the sites Vinkel-Munnekens and Heesch-McDonald's, we wanted to emphasize the value of this kind of (small-scale) excavation executed by local amateur-archaeologists, not only for scientific research but also for our knowledge of (local) history. We, therefore, want to thank G. Smits († 2013), L. Ceelen and H. Pennings, *citizen scientists avant-la-lettre*, for their efforts in rescuing important archaeological information that otherwise would have been lost forever.

References

- Bakels, C.C. 2009. *The Western European loess belt. Agrarian history, 5300 BC-AD 1000*. Dordrecht Heidelberg London New York: Springer.
- Broeke, P. van den 2012. *Het handgevormde aardewerk uit de IJzertijd en de Romeinse Tijd van Oss-Ussen. Studies naar typochronologie, technologie en herkomst*. (Dissertation Leiden University). Leiden: Sidestone Press.
- Broeke, P. van den 2005a. IJzersmeden en pottenbaksters: Materiële cultuur en technologie, in: Louwe Kooijmans, L.P., Broeke, P.W. van den, Fokkens, H. & Gijn, A. van (eds.). *Nederland in de prehistorie*. Amsterdam: Bert Bakker, 603-626.
- Broeke, P. van den 2005b. Zoutzieders aan de Noordzee: Zeezout voor het achterland, in: Louwe Kooijmans, L.P., Broeke, P.W. van den, Fokkens, H. & Gijn, A. van (eds.). *Nederland in de prehistorie*. Amsterdam: Bert Bakker, 513-517.
- Fokkens, H., As, S. van & Jansen, R. (eds.) in prep. *The second decade of excavations in Oss*. *Analecta Praehistorica Leidensia*. Leiden: Sidestone Press.
- Fokkens, H., Jansen, R. & Wijk, I.M. van 2009. *Oss-Zevenbergen: de lange termijn-geschiedenis van een prehistorisch grafveld*. Archol rapport 50. Leiden: Archol BV.
- Fontijn, D.R. 2002. *Sacrificial landscapes. Cultural biographies of persons, objects and 'natural' places in the Bronze Age of the southern Netherlands, c. 2300-600 BC*. *Analecta Praehistorica Leidensia* 33/34. (Dissertation Leiden University). Leiden: Leiden University.
- Fontijn, D.R., Jansen, R. & Fokkens, H. 2004. Opgraving van een depositielocatie uit de bronstijd: Oss-Vorstengrafdonk (NL). *Lunula. Archaeologia protohistorica* XII, 29-37.
- Fontijn, D.R., Vaart, S. van der & Jansen, R. (eds.). 2013. *Transformation through Destruction. A monumental and extraordinary Early Iron Age Hallstatt C barrow from the ritual landscape of Oss-Zevenbergen*. Leiden: Sidestone Press.
- Goossens, T.A. & Meurkens, L. 2013. *Een opgraving op de nieuwbouwlocatie van streekziekenhuis Bernhoven*. Archol-rapport 188. Leiden: Archol BV.

- Helm, P. van den 2017. *The Maashorst Residence. Theoretical approach on the possibilities of Iron Age Habitation at the Maashorst*. Leiden (unpublished thesis Leiden University).
- Hensen, G. & Janssens, M. 2016. *Ronddolen door de Zwarte Molen: onbegrensde nederzettingen uit de ijzertijd tot en met de volle middeleeuwen, gemeente Bernheze. Archeologisch onderzoek: een opgraving*. RAAP rapport 2794. Weesp: RAAP Archeologisch Adviesbureau.
- Hiddink, H. 2010. *Materiaal en Methoden 2: Romeins aardewerk van de Zuid- Nederlandse zandgronden*. Amsterdam: ACVU-HBS.
- Hoof, L.G.L. van & Jansen, R. 2002. *Archeologisch onderzoek A50 te Uden; bewoning uit de ijzertijd en de vroege, volle en late middeleeuwen*. Archol rapport 12. Leiden: Archol BV.
- Hoof, L.G.L. van 2008. Bewoning uit de late prehistorie in Nistelrode: laat-neolithicum tot ijzertijd, in: Jansen, R. (red.). *Bewoningsdynamiek op de Maashorst. De bewoningsgeschiedenis van Nistelrode van laat-neolithicum tot volle middeleeuwen*. Archol rapport 48. Leiden: Archol BV, 65-94.
- Jansen, R. & Linde, C. van der 2013. The physical and archaeological landscape of the Oss-Zevenbergen barrow group, in: Fontijn, D.R., Vaart, S. van der & Jansen, R. (eds.). *Transformation through Destruction. A monumental and extraordinary Early Iron Age Hallstatt C barrow from the ritual landscape of Oss-Zevenbergen*. Leiden: Sidestone Press, 35-46.
- Jansen, R. & Laan, K. van der 2011. *Verleden van een bewogen landschap. Landschaps- en bewoningsgeschiedenis van de Maashorst*. Utrecht: Matrijs.
- Jansen, R. & Fokkens, H. 2007. *Het vorstengraf van Oss re-reconsidered. Archeologisch onderzoek Oss-Vorstengrafdonk 1997-2005*. Archol rapport 49. Leiden: Archol BV.
- Koning, J. de & Vaars, J.P.L. 2003. *Archeologische opgravingen te Rosmalen. Nederzettingssporen uit neolithicum, bronstijd, vroege ijzertijd en midden-ijzertijd in de noordelijke Maasvallei*. Hollandia Reeks 3. Zaandijk: Hollandia, cultuurhistorisch onderzoek en archeologie.
- Kort, J.-W. de 2002. Schapen op de heide. Een vegetatiereconstructie van de omgeving van het vorstengraf van Oss in de Vroege IJzertijd, in: Fokkens, H. & Jansen, R. (eds.). *2000 Jaar bewoningsdynamiek. Brons- en ijzertijdbewoning in het Maas-Demer-Scheldegebied*. Leiden: Universiteit Leiden, 341-353.
- Loopik, J. 2013. *Gemeente Maasdonk – Vinkelsestraat 90 in Vinkel. Een Inventariserend Veldonderzoek in de vorm van proefsleuven*. ADC Rapport 3364. Amersfoort: ADC Archeoprojecten.
- Løvschal, M. 2015. Lines of landscape organisation: Skovbjerg Moraine (Denmark) in the first millennium BC. *Oxford Journal of Archaeology* 34(3), 259-278.
- Mourik, J. M. van 1987. Laat-Glaciaal veen en Subatlantisch stuifzand bij de Peelrandbreuk tussen Nistelrode en Uden. *Geografisch Tijdschrift* XXI-5, 421-436.
- Schinkel, K. 1998. Unsettled settlement, occupation remains from the Bronze Age and the Iron Age at Oss-Ussen. The 1976-1986 excavations, in: Fokkens, H. (ed.). *The Ussen Project. The first decade of excavations at Oss*. *Analecta Praehistorica Leidensia* 30. Leiden: Sidestone Press, 5-306.
- Vaart-Verschoof, S. van der 2017. *Fragmenting the Chieftain. A practice-based study of Early Iron Age Hallstatt C elite burials of the Low Countries*. PALMA 15a. Leiden: Sidestone Press.

