



ARJAN LOUWEN & DAVID FONTIJN

DEATH REVISITED

The excavation of three Bronze Age barrows and surrounding landscape at Apeldoorn-Wieselseweg



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The excavation of three Bronze Age barrows and surrounding landscape at Apeldoorn-Wieselseweg

ARJAN LOUWEN & DAVID FONTIJN (EDS)

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Published by Sidestone Press, Leiden
www.sidestone.com

Lay-out & cover design: Sidestone Press

Photograph cover: K. Wentink

ISBN 978-90-8890-580-3 (softcover)

ISBN 978-90-8890-581-0 (hardcover)

ISBN 978-90-8890-582-7 (PDF e-book)

The research was part of the Dutch Organisation of Scientific Research (NWO) funded projects 'Ancestral Mounds' (no. 360-60-080) and 'Economies of Destruction' (VICI no. 277-60-001).

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Chapter 8

Mound 2

Arjan Louwen, David Fontijn,
Cristian van der Linde, Maurits Pruijsen,
Liesbeth Smits & Erica van Hees

8.1 Introduction

Mound 2 is located some 90 metres to the north of Mound 1 and is positioned against the edge of a densely wooded plot with young pine trees (Fig. 8.1). Older deciduous trees grow around the barrow itself with significantly larger spacing between them. Multiple trees also grew on the mound body itself. The terrain has a slight incline to the south of the wood path, and Mound 2 as such is just visible between the trees from this path. The present-day southwest flank of the mound gradually transitions into this slight slope, while the eastern flank is still relatively round and steep. The mound body is still some 50 to 60 centimetres high. Due to the slope of the terrain it is difficult to ascertain where the natural relief transitions into the barrow itself. The current diameter is at least 8 metres.



Fig. 8.1: Mound 2 prior to excavation. Photograph taken facing north.

At Mound 2 the eight weeks of fieldwork also proved very much necessary in order to properly excavate and document even only the southwest quadrant (Trench 201). In total seven excavation levels were dug and seven Middle Bronze Age A cremation burials exposed. The internal connections and correlation of the various graves and how they related to the mound body are discussed in this chapter. As was also the case at Mound 1, both the natural subsoil and the mound body appear to have become completely homogenized, which made interpreting the various features relatively challenging.

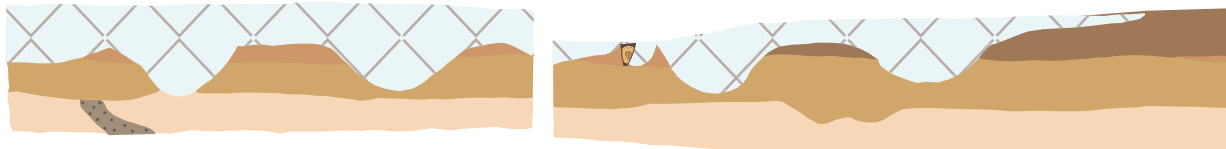
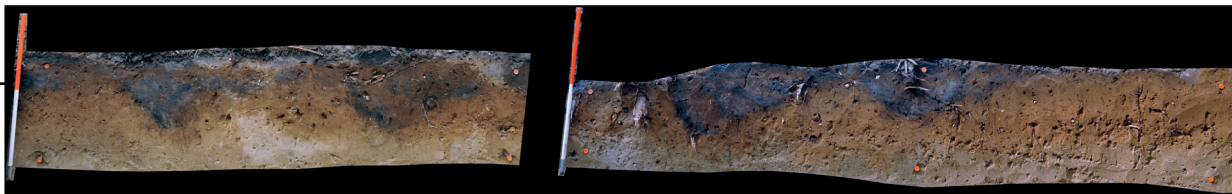
8.2 Structure Mound 2

Prior to the start of the fieldwork, the entire southwest quadrant of Mound 2 was cleared of leaves, wood and loose debris. The resulting level (1) followed the contour of the mound and as such is the only non-horizontal level. A young soil had formed in the uppermost regions of the subsoil over the entire mound body (Fig. 8.3). This

young soil, consisting of a dark grey-black, humus-rich top layer (A0-horizon) with underneath it a homogenous brown illuvial layer (B-horizon), forms the uppermost 15–20 centimetres of the barrow. The presence of a number of plough marks that date to the 20th century underneath this soil show it to be a young one.

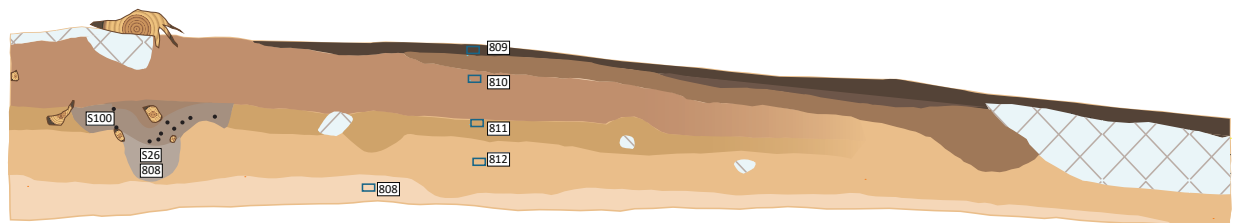
The remnants of an older Moder Podzol are extremely vaguely visible underneath the young soil. This old Moder remnant shows up as a vague light brown/beige horizon at least 15 centimetres thick. The bottom of the old Moder Podzol gradually fades into the homogenous ruddy, light brown yellow mound body. Level 2 (Fig. 8.4) was dug just underneath the young soil in the top of the barrow and was partially located in the old Moder remnant. The just mentioned homogenous ruddy, light brown yellow complex extends some 60–70 centimetres under the top of the barrow and together with the already mentioned layers forms the original mound body. The texture of the mound body can best be described as slightly loamy sand with fine gravel. Pebbles are sporadically present

W



N

S



throughout the entire barrow. Level 3 was dug halfway through the original mound body.

Some 60 to 70 centimetres under the top of the mound there is a greyish haze to the ruddy, light brown yellow colour of the mound body (see Figs. 8.2 and 8.3). It is also from this level onwards that multiple features became visible, including a concentration of flint (see Section 8.3.2). The number of surface finds while digging excavation Levels 4 and 5 also markedly increased. These observations indicate that the old surface must have been located at roughly this level. In the profile section this zone was between 10 and 20 centimetres thick (Figs. 8.2 and 8.3). Level 4 (Fig. 8.5) was dug in the top of this complex, with Level 5 dug some 10 centimetres lower. The texture of the zone around the old surface is consistent with that of the mound body. As can be seen in Figure 8.6, the various plough marks have penetrated through the mound to the depth of Level 5. A number of root systems also left their marks to a depth of the old surface underneath the barrow.

Underneath the old surface the subsoil has the same ruddy, light brown-yellowish colour as the mound body,

only with a more gravelly texture. Level 6 was dug at this depth. Roughly 1 metre underneath the present-day barrow top the subsoil finally changes to a pale, light grey coarse sandy complex with gravel and pebbles. Level 7 was dug as a final control level underneath this complex (Fig. 8.7).

8.3 Features and structures

In total 27 feature numbers were assigned for Mound 2 (Trench 201) (see Tab. 8.1). Seven of these features are cremation burials and another eleven features belong to Grave 8. Two features were eventually discarded, two belonged to forestry activities and four features are likely natural in origin. The last feature concerns a concentration of flint on the old surface. The various features are discussed per context in the following.

8.3.1 Graves

In total seven cremation graves were found in the southwest quadrant of Mound 2. The various burials were located both in and under the barrow, but all seven date to the Middle Bronze Age A (see Tab. 8.3). In

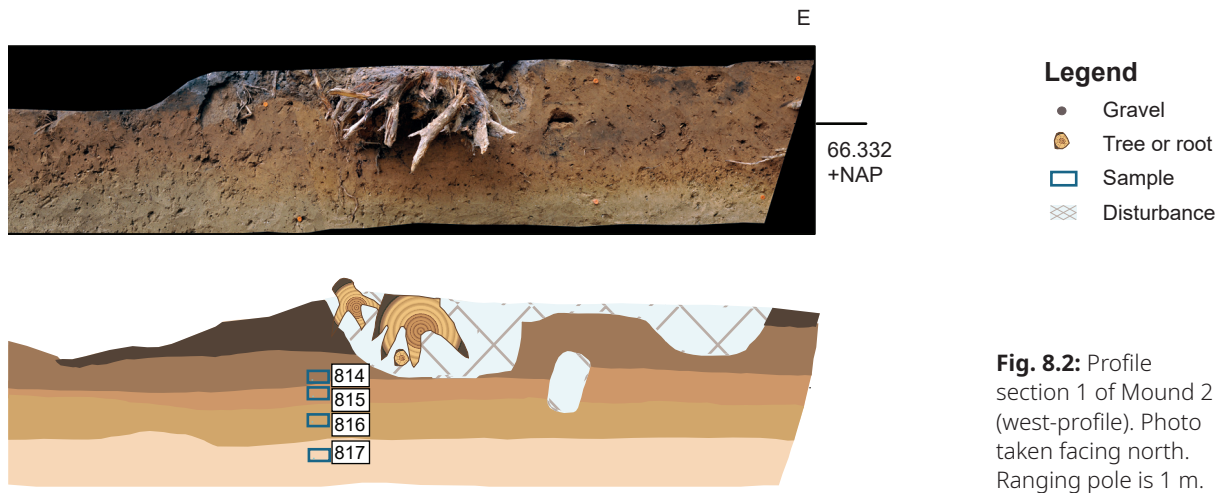


Fig. 8.2: Profile section 1 of Mound 2 (west-profile). Photo taken facing north. Ranging pole is 1 m.

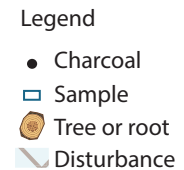


Fig. 8.3: Profile section 2 of Mound 2 (south-profile). Photo taken facing east. Ranging pole is 1 m.



Fig. 8.4: Level 2.



Fig. 8.5: Level 4.



Fig. 8.6: Level 5.



Fig. 8.7: Level 7.

addition several features without cremations remains are linked with the various graves (Tab. 8.1). These will be discussed in the following alongside the burials to which they relate. As was already noted, it was decided to number burials sequentially throughout the three barrows, which is why the numbering for Mound 2 does not start with Grave 1. The physical anthropological analyses were conducted by dr. L. Smits (University of Amsterdam), and the reader is referred to App. 1 for more information.

Grave 2

Grave 2 was encountered quite high in the mound body. There was a square feature located centrally in the top of the barrow (S2, Fig. 8.8), which was excavated in four equal segments. Initially this was thought to maybe be a burial pit, but later it was established to be a series of

plough furrows. In the feature the reversed topsoil was clearly visible. A very small amount of cremation remains were collected from this ploughed out area (20 gr.). These were found both in the ploughed topsoil, as in the ploughed mound body. At Level 2 the plough furrows extended some 20 centimetres deep. This must therefore be the remains of a disturbed cremation grave. Grave 2 should therefore not be considered a closed context, but rather a collection of loose cremation remains displaced from elsewhere.

Graves 4 and 8 were located in the direct vicinity of Grave 2. Both burials, however, were located at a lower depth in or under the barrow. The bone remains from Grave 4, however, have a characteristic ruddy colour that the bones from Grave 2 do not. Moreover, Grave 8 was covered by a number of charred beams and located too deeply to have been disturbed by ploughing. It is therefore impossible that the bone remains from Grave 2 originate

Trench	Feature	Level	Interpretation in the field	Interpretation definitive	Depth (cm)	Complex
201	1	2	Plough mark	Reclamation/plough mark	n.a.	Forestry
201	2	2	Cremation	Cremation	19	Grave 2
201	3	4	Cremation	Cremation		Grave 3
201	4	4	Cremation	Cremation	30	Grave 4
201	5	4	Recent	Reclamation/plough mark	9	Forestry
201	6	4	XXX	XXX		Discarded
201	7	4	Flint concentration	Flint concentration		Flint concentration
201	8	5	Cremation	Cremation		Grave 5
201	9	5	Natural disturbance	Natural disturbance	n.a.	Discarded
201	10	5	XXX	Top charred beam		Grave 8
201	11	5	XXX	Top charred beam		Grave 8
201	12	5	XXX	Top charred beam		Grave 8
201	13	6	Cremation	Cremation	10	Grave 6
201	14	5	Posthole	Top charred beam		Grave 8
201	15	4	Cremation	Cremation	40	Grave 7
201	16	5	XXX	Top charred beam	22	Grave 8
201	17	7	Pit	Pit??	16	Probably natural
201	18	7	Pit	Pit??	18	Probably natural
201	19	7	Posthole	Pit??	14	Probably natural
201	20	7	Pit	Pit??	26	Probably natural
201	21	51	Charcoal concentration	Charred beam	n.a.	Grave 8
201	22	51	Charcoal concentration	Charred beam	n.a.	Grave 8
201	23	51	Charcoal concentration	Charred beam	n.a.	Grave 8
201	24	51	Charcoal concentration	Charred beam	n.a.	Grave 8
201	25	51	Charcoal concentration	Charred beam	n.a.	Grave 8
201	26	52	Cremation	Cremation	>30	Grave 8
201	100	5	Charcoal concentration	Charred beam	n.a.	Grave 8

Tab. 8.1: Overview features Mound 2.

Fig. 8.8: 'Grave' 2.
The more or less square feature on this photograph is made up of three parallel plough furrows. The cremation remains designated Grave 2 were found in these furrows. Photograph taken facing west.



from either of these graves. Grave 2 therefore must be the disturbed and moved bone remains of an unknown grave. In any case, the high position of the cremation remains from Grave 2 suggest that this is not a primary grave, but rather a secondary burial dug into the mound body. While physical anthropological analysis of such a small amount of bone remains could yield only limited results, the robusticity of the bones suggest an adult individual (see also App. 1).

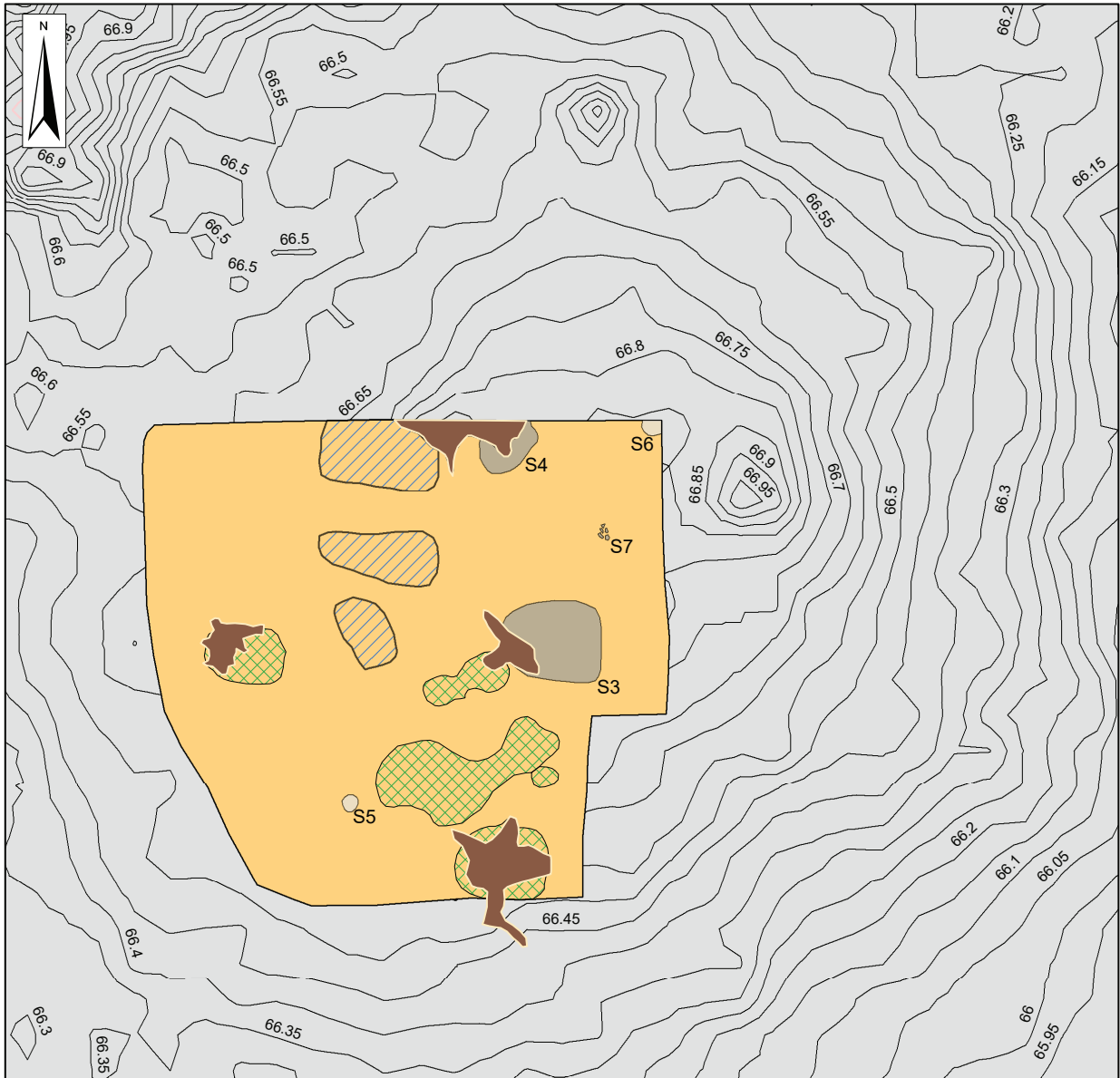
Grave 3

Several graves started to show in the excavation level at the depth of Level 4 (Fig. 8.9). One of these was Grave 3 (S3), which was located some 3.5 metres from the centre of the mound. The grave, likely that of a female some 20–30 years old at the time of her death (see App. 1), initially took the shape of a zone with cremation remains which were excavated in four equal segments. From Level 5 and the sub-levels 51 through 53, clear concentrations of bones also became visible (Fig. 8.10). Both in the various excavation levels as in the sections, however, no pit could be observed. Yet still the various compact concentrations of sometimes some 10 centimetres thick indicate that the bone remains really were located in a pit. A scatter on the old surface would have resulted in a more diffuse distribution of the bone material. It is also possible that the cremation remains were originally deposited in an organic

container, which later fell apart. The fact that the bone concentrations were found between Level 4 and 5 (the old surface zone), however, suggests that any such container originally would have been partially buried.

To summarize, there is only indirect evidence of a burial pit. The distribution of the bone material, however, does argue against the idea of a bone scatter on the old surface. We are in the dark with regards to the shape and dimensions of the pit. In any case the outer limits of the zone containing the cremation remains were some 95 by 65 centimetres. In addition, the cremation remains were found at a depth of 30 centimetres underneath Level 4. The largest concentrations were found some 10 to 20 centimetres underneath that excavation level. The original dimensions of the burial pit with regards to Level 4 will have had the maximum dimensions noted above as (some) bone remains are always moved from their original context through taphonomic processes.

With regards to the mound body, there are also some difficulties. It is clear that the grave was not centrally located underneath the barrow, but more towards the foot of the mound. The question remains whether the foot of the barrow is located over the grave, or whether the grave was dug in through the barrow foot. It is striking in this regard that the grave only became visible at the depth of the old surface. A counterargument is the fact that the mound body at the location of the grave would



Legend

- Features Level 4
- Discarded features Level 4
- Plough marks level 4
- Disturbances Level 4
- Tree trunks
- Level 4

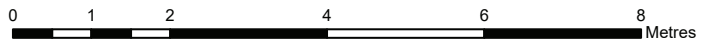


Fig. 8.9: Field drawing Level 4.

have been several decimetres thick at the most. It is important to note that both options are equally possible.

Grave 4

Underneath the tree trunk located some 2 metres from the centre of the mound in the western profile, a vaguely

delineated pit became visible at the depth of Level 4 (S4). The pit was only distinguishable from the surrounding matrix as the fill was a slightly more ruddy colour. In this pit a significant amount of cremation remains from a 20–30 year old female were found, in addition to pottery fragments (Figs. 8.11 and 8.22). An object was



Fig. 8.10: The concentration of cremation remains in Grave 3. Photograph taken facing northwest.

also found among the cremation remains (Figs. 8.24 and 8.25), which could perhaps be a (cloak) pin/buckle or an awl (Section 8.4.3).

A slightly oval zone some 50 by 70 centimetres with a ruddy colour vaguely showed on the excavation level. Within it, there was a clear concentration of cremation remains with both a horizontal and a vertical distribution of some 20 centimetres (Fig. 8.12). Fragments of burnt bones were also found outside of this concentration in a number of spots. Even the cremation remains had a ruddy colour. The original cut of the pit was disturbed by tree roots and as result could not be recorded with any accuracy. Still, the ruddy coloured fill made it possible to establish that this grave was dug through the mound body and as such concerns a secondary burial. The cut was visible some 5 centimetres under the depth of excavation Level 5. It is unclear what caused the ruddy colour of the fill. A possible explanation is that the pottery from Grave 4, which has the same ruddy colour, was largely disintegrated through taphonomic process and became distributed through the surrounding soil. Texture analysis of the Wieselseweg soils confirms the extreme processing by animals (see Section 5.4). Almost 4 grams of loose crushed quartz was collected from the pit fill, also suggesting a certain disintegration of the original pot.

It, of course, remains the question whether the pottery present was part of an urn or a grave gift. The largest surviving fragment was found with the outside facing

down, directly under and slightly to the northeast of the concentration of cremation remains. The lack of both a pot base underneath the concentration cremation remains and a significant portion of the vessel wall around the cremation remains seems to argue against a function as urn. In light of the theory offered above regarding the disintegration of the pot, this statement does not appear to hold up. It is still worth noting that the surviving pot segment was found lying flat, with the outer side down, outside the cremation remains. Use of the pot as urn would only have been possible if there was open space around the urn for a longer period of time, allowing it to slowly fall apart, after which all other parts gradually disappeared, leaving only this part of the pot. Such a series of events, however, is highly unlikely.

A far more plausible explanation would be that the sherds were originally not part of an urn, but rather a grave good which had been fragmented prior to being deposited in the grave. Parts of this grave gift then gradually disintegrated while part survived. Moreover, the surfaces of the old breaks on the pottery are completely oxidized while the core of the sherds was fired in reduction. This observation indicates exposure to fire after fragmentation. It therefore is quite possible that the pottery accompanied the deceased on the pyre and was later collected and mixed with the cremation remains. This observation also argues against a use as urn. It is more likely that this concerns a grave good that was burned on the pyre.



Fig. 8.11: Grave 4. Unfortunately the photograph does not properly show the ruddy colour of the pit. What is clearly visible is how a large sherd is located right next to and underneath the cremation remains. Photograph taken facing west.

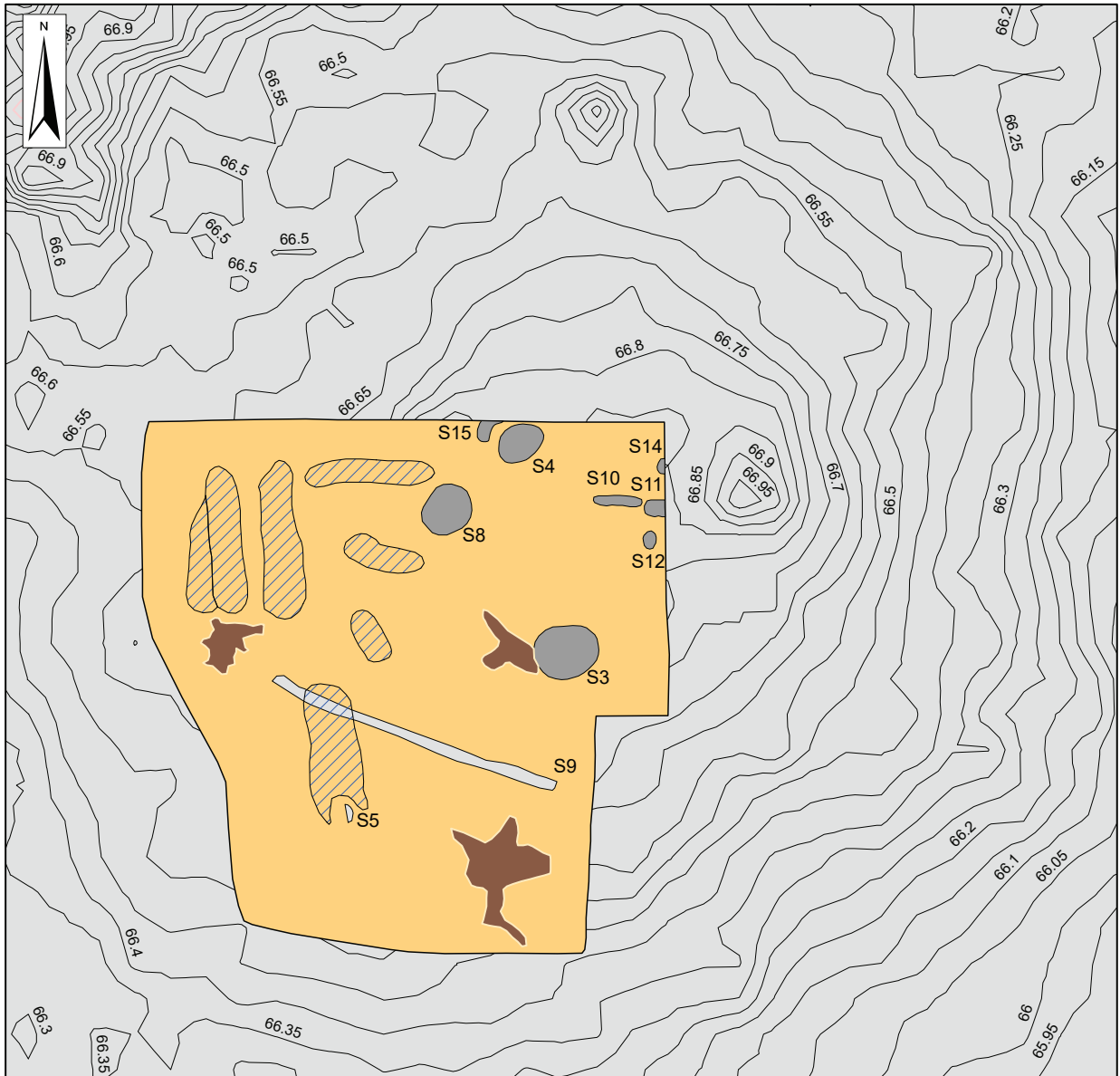


Fig. 8.12: Detail of the distribution of the concentration of cremation remains in Grave 4. Photograph taken facing west.

Grave 5

Some 50–75 cm southwest of Grave 4, roughly 3 metres from the centre of the mound, at the depth of Level 5 (Fig. 8.13), a new concentration of cremation remains was encountered (S8, Fig. 8.14). As was also the case with Grave 3, the edges of the feature were not easily distinguishable in the excavation level or in the section.

Most of the cremation remains (978 gr. in total), originating from an adult individual who was between 20–40 years old at the time of death (see App. 1), were found in a zone of 55 × 35 centimetres (Fill 1). It is likely that the roots resulted in a wider distribution of the bone remains outside of the original grave. Within this zone (Fill 1), two compact concentrations of clearly larger bone fragments could be



Legend

- Features Level 5
- Discarded features Level 5
- Plough marks Level 5
- Tree trunks
- Level 5

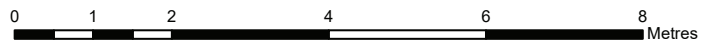


Fig. 8.13: Field drawing Level 5.

distinguished. Both concentrations (segments 2 and 4) were excavated in 5 × 5 centimetres squares. Unfortunately it could not be determined whether the cremation remains were scattered or originally deposited in an organic container. While once again no direct physical evidence for the presence of a grave pit could be recorded, the two concentrations of cremation remains some 5 centimetres

thick at a depth of 5–10 centimetres below Level 5 does suggest that the cremation remains were buried. Here it also remains the question whether this complex was dug into the ground from the old surface underneath the barrow, or at later stage from a higher level. It is striking that, as was the case with Grave 3, it appears to have been dug deeper than the old surface underneath the mound.

Grave 6

The excavators were astounded to find a fifth grave (Grave 6, S13, Fig.8.15) while digging a control level (Level 6) far beneath the old surface underneath the mound. The extremely vaguely defined pit (75 × 85 cm) must have been located some 5 metres from the centre of the mound and had not been visible at all at a higher

level. The considerable amount of cremation remains (1582 gr.) was spread throughout the entire pit and formed a slight concentration in the northern half. Amongst the cremation remains a burnt bone needle was found (Figs. 8.26 and 8.27) as well as another worked piece of animal bone of which the original function remains unclear (Fig. 8.28). Also in section the pit proved to be



Fig. 8.14: The largest concentration of cremation remains in Grave 5 (segment 2). Photograph taken facing west.



Fig. 8.15: Grave 6 directly after digging the excavation level, showing once again no clear burial. Photograph taken facing south.

very vaguely defined. In any case, the cremation remains were found up to 10 centimetres below Level 6. The bone remains were collected in squares of 15 × 15 centimetres. The distribution of the cremation remains recorded here indicates a bone scatter in a pit. Analysis of the cremation remains later revealed that two individuals had been interred in the grave: A young woman 17–24 years old at the time of her death, and a second woman who could not have been more than 40 years old at the time of death (see also App. 1). Grave 6 thus far remains the only grave of the Wieselseweg in which the remains of multiple individuals were found.

In appearance Grave 6 is comparable with Graves 3 and 5. Once again it concerns a poorly to not visible pit in which the cremation remains were left. Different from Graves 3 and 5 is that the cremation remains appear to

be more equally distributed over the pit. It is striking that all three graves only became visible when the first cremation remains were uncovered.

Grave 7

Grave 7 (S15) is a concentration of cremation remains (568 gr.) without clear borders, which was partially exposed in the western profile section (Fig. 8.16). The grave was located underneath the same tree trunk as Grave 4 and as a result suffered damage from the same root systems (Fig. 8.17). Initially it was thought that this burial related to Grave 4. While Grave 7 also contains the remains of a 20–30/40 year old female, the physical anthropological analysis established that Grave 4 and 7 contain the remains of different individuals (see App. 1). The characteristic ruddy colour of both the pit fill and the

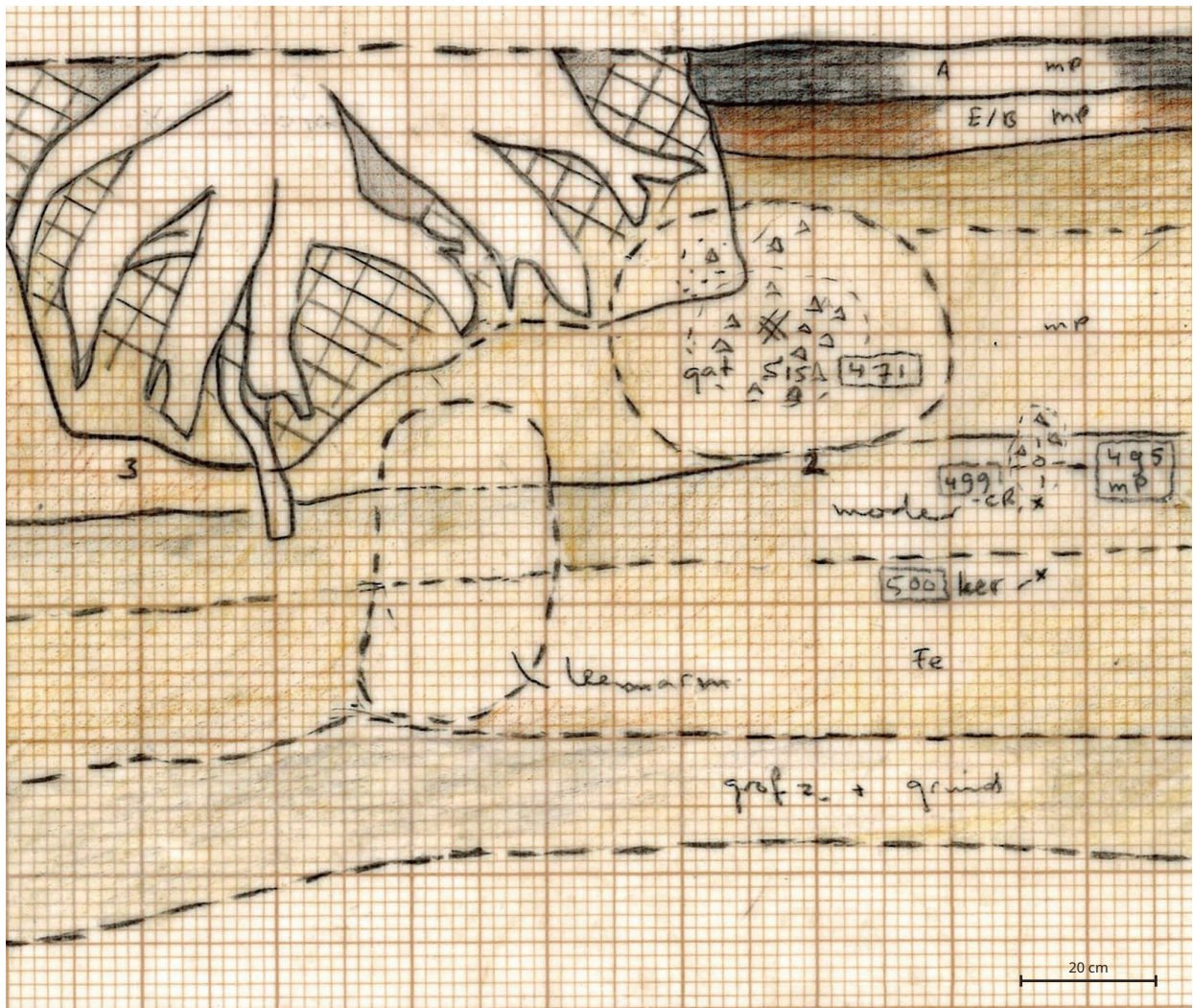


Fig. 8.16: Field drawing profile section 1 (west-profile) of Mound 2. The speckled zone 'S15' marks the location of Grave 7. The horizontal bands below with the word 'moder' mark the zone of the old surface under Mound 2 (drawing: Cristian van der Linde and Fleur Jacques).

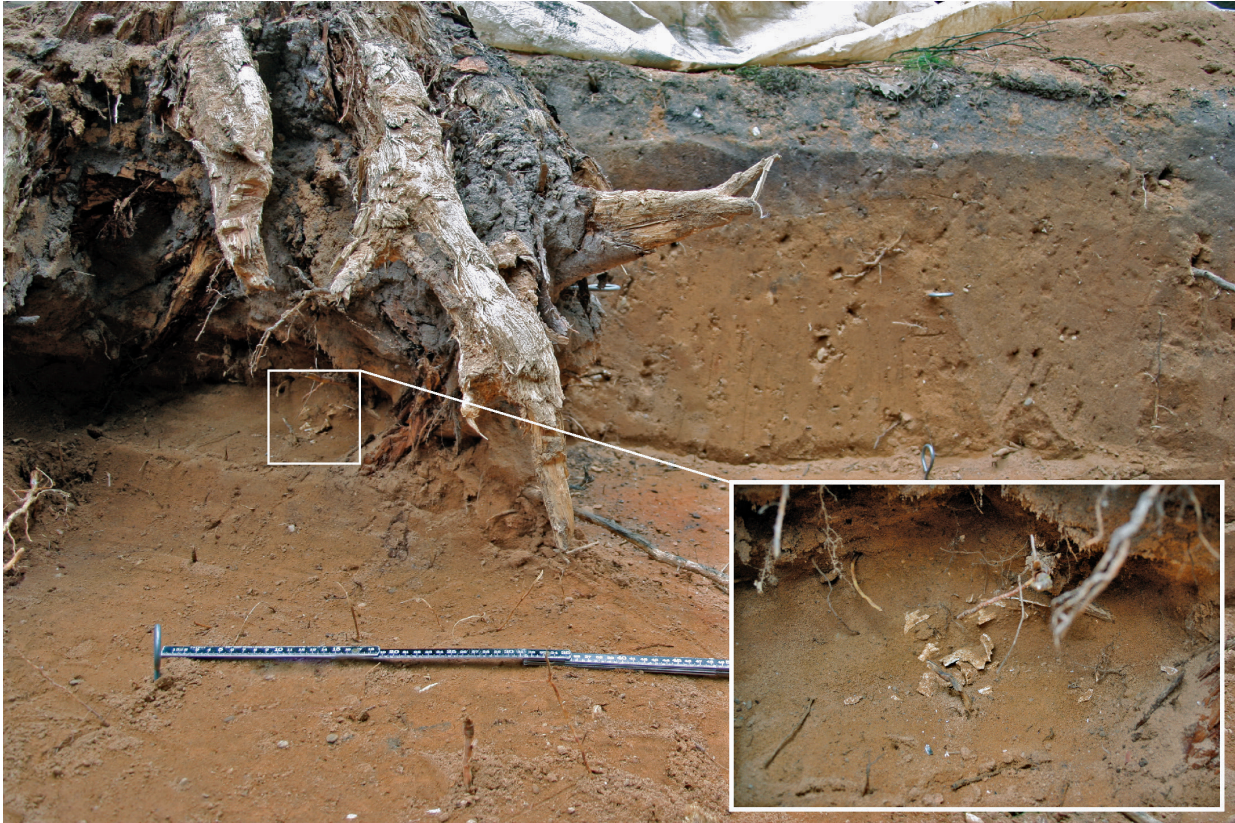


Fig. 8.17: Grave 7 is just visible underneath the tree trunk. Photograph taken facing north (edited by Joëlla van Donkersgoed).

bone remains of Grave 4 are also not present in Grave 7. A 5 centimetres wide band of charcoal specks, however, was observed directly to the west of the cremation remains at Level 5. While Grave 7 was only partially exposed as part of it is located in the unexcavated northwest quadrant, it could be established that it is a secondary burial dug into the mound body, as the cremation remains were observed more than 30 centimetres above the probable old surface (Fig. 8.16).

Grave 8

Multiple dark grey spots started to show on Level 5 in the corner of the southwest quadrant, at the centre of the mound (S10, S11, S12, S14 and S16). The grey colour of these was the result of charcoal specks in the features. Surrounding these features was a zone, with a radius of 2 to 2.5 metres from the corner of the quadrant, that was slightly darker than the ruddy subsoil present at the foot of the mound (see Figs. 8.3 and 8.13). This dark zone and accompanying features were clearly covered by the mound body. As the features, furthermore, were located in the centre of the mound, care was taken that this could be a central burial. As these features were uncovered late

in the 2008 field campaign, it was decided to wait and further excavate them in 2009.

This proved to be a wise decision when we returned to the field in June 2009. The careful excavation of this zone revealed that the charcoal rich features were horizontally positioned charred beams. The complex was oriented east-west and continued into the unexcavated southeast quadrant (Fig. 8.18). The various pieces of wood were given their own new feature numbers in 2009 (S21–S25), and the whole complex of charred beams additionally was labelled ‘S100’. The maximum length of this complex (from the most westerly edge to the southern profile section) measured 105 centimetres. While initially five separate pieces of wood could be distinguished, it originally likely were two larger beams, of which the northern example fell apart into several pieces (S21, S23, S24 and S25). The southern beam (S22) was clearly distinct from the rest and runs into the southern profile section in parallel to the northern beam. Analysis showed them to be oak (*Quercus*).¹⁹ The fact that multiple beams

¹⁹ Analysis of wood fragments conducted by Erica van Hees BA (Leiden University).



Fig. 8.18: Photo series charred beams in Grave 8.

run horizontal and in parallel, make it likely that they were positioned with care.

At a deeper level (Level 51) several fragments of cremation remains were observed between the beams (Fig. 8.19). Upon removal of the charred beams, the edge of a cremation pit showed underneath the level of the wood (S26). This was only partially present in the southwest quadrant, and as such it cannot be stated with

any certainty whether it was a round or elongated pit. By the southern profile section the pit was 34 centimetres wide and 22 centimetres deep (see Fig. 8.20). In total 'only' 372 grams of cremation remains were collected from S26. It is likely that a considerable portion of the cremation remains is still present in the unexcavated southeast quadrant. The relatively small amount of bone remains allows only very cautious statements regarding sex and



Fig. 8.19: Detail Grave 8. Sketch with the charred beams covering a pit cremation remains.

age. It is possible that these are from a man who was older than 20 years at the time of his death (see App. 1).

While Grave 8 was not completely excavated, the data collected thus far enable us to make a few statements regarding the funerary ritual. For example, we are certain that the burned beams do not indicate the presence of a funeral pyre at this location. The cremation remains are not located amongst the wood remains, but were clearly carefully sorted before being buried in a small pit. Following this, the burned beams were carefully placed over the grave. These must have been partially dug in, as they were found below the level of the ancient surface (see Figs. 8.3 and 8.20). The mound body is clearly located over Grave 8. It is not unlikely that these beams originate from the pyre as this is a cremation grave. Yet still it is striking that the beams were carefully positioned in/over the grave. It even appears that they were an important part of the grave inventory. As will also be shown in Chapter 9 on Mound 3, the placing of (probable) pyre remains in cremation graves is not exceptional for the barrows of the Wieselseweg. A final important conclusion regarding Grave 8, is its relation to Mound 2. The whole complex is positioned under the centre of the barrow and therefore could be both the

primary and central burial of Mound 2. Should this be the case, then both the primary central burial as well as the secondary burials in the mound body date to the Middle Bronze Age A (see Table 8.3).

8.3.2 Other features

Concentration of flints at the depth of the old surface

A concentration of ten flint fragments was encountered when digging from Level 4 to Level 5 (Fig. 8.21). This concentration (S7) was located some 2 metres from the corner of the southwest quadrant, is 13 centimetres in diameter and appears to have been left on the old surface. Cuts from a pit were not visible in higher levels. The function of this strange concentration of flint is unclear. In any case there were no artefacts among the flint assemblage of S7. Refitting did show that six of the flakes originated from two larger chunks. The other four fragments were all small cores (see also Section 8.4.2). All fragment are larger than 1 square centimetre, and splinters and small flakes are noticeably absent. The flint therefore was likely not knapped here. Additionally, the concentrated distribution of



Fig. 8.20: Grave 8 in profile section 2 (southern profile section) of Mound 2, clearly showing how the charred beams cover a pit with cremation remains. Photograph taken facing east.



the various fragments would seem to suggest that they were consciously placed in this manner. Finally, it is striking that the concentration stopped roughly at the southwest corner of Grave 8. A relationship with this burial cannot be established. It is likewise difficult to date the flint assemblage, though the 'ad hoc' manner in which the flint was worked, especially the four small cores, is consistent with Bronze Age flint knapping (Van Gijn 2010; Van Gijn/Niekus 2001, 307). It is therefore not impossible that it is contemporaneous with one of the graves underneath Mound 2.



Fig. 8.21: Concentration of flints on the old surface. Photograph taken facing south.

Vague pits in Level 7

When digging the control level (Level 7), four ruddy-coloured features were uncovered at the western (S18, S19 and S20) and southern (S17) foot of the mound. Initially these features were interpreted as possible pits. However, the features are very irregular in shape and yielded no finds. All four features were sampled for pollen analysis. But as was already shown in Chapter 5, pollen analysis at the Wieselseweg did not yield any satisfying results. It therefore very much remains in question whether these features are anthropogenic. Similar, natural soil features were also found in the control levels dug under Mounds 1 and 3.

8.4 Find material

8.4.1 Pottery

A total of 231 grams (15 find numbers) of prehistoric pottery was collected in the southwest quadrant of Mound 2 (Tab. 8.2). Of that, 208 grams originate from a small pot from a secondary burial and another 10 grams is an indeterminate ceramic chunk from S15 (V372). The remaining 13 grams primarily consist of indeterminate crumbs (V131, V245 (both S3), V501 (S13) and V788

(S100)) and a loose wall sherd with crushed granite temper of unknown origin (V500). Only the small pot from the secondary burial remains to be described of the pottery from Mound 2.

Pottery from Grave 4

In Grave 4 (S4) the fragile remains of a pot were found directly underneath and adjacent to the cremation remains. In total nine find numbers (V41, V42, V146, V147, V163, V288, V289, V292 and V497) were assigned to the various sherds that are certainly from the same vessel. Unfortunately it is not possible to reconstruct a complete profile (Fig. 8.22), though some statements can be made regarding the original vessel shape based on the various sherds. It must have been fairly irregular with a slightly protruding and somewhat pinched outward rim. Close underneath this rim (estimated to be 2–3 cm) there is a thickening in the wall profile. This thickening forms the transition from the weakly profiled shoulder and is decorated with a single, horizontal row of rough fingertip impressions. In some spots the wall thickness just above the thickening is only 6–7 millimetres. The wall thickness at the height of the fingertip impressions is 8–9 millimetres. Whether this is a raised cordon is difficult to say based

F. no.	Trench	Level	S	N	Wght.	Pot section	Temper	Surf. fin.	Thickness	Firing cond.
41	201	4	4	>20	24.2	Wall	Crushed quartz	Smooth	8–10 mm	Ox-Red
42	201	4	4	6	15.7	Wall	Crushed quartz	Smooth	10 mm	Ox-Red
131	201	52	3	2	1.9	Indet.	Bone or shell	Indet.	4 mm	Ox-Red-Ox
146	201	4	4	>100	43.8	Indet.	Crushed quartz	Indet.	Indet.	Ox
147	201	4	4	>5	38.2	Wall	Crushed quartz	Smooth	8–9 mm	Ox (Red)
163	201	5	4	1	1.1	Indet.	Crushed stone, CBDF	Indet.	Indet.	Ox-Red-Ox
245	201	4	3	1	1.5	Wand	Bone or shell	Smooth	4–5 mm	Red
288	201	4	4	1	1.1	Indet.	Crushed stone, CBDF	Smooth	5 mm	Red
289	201	4	4	>35	.30	Wall/rim	Crushed quartz	Smooth	6–11 mm	Ox-Red
292	201	4	4	7	7.7	3 Wall	Crushed quartz	Indet.	Indet.	Ox-Red
372	201	4	15	1	9.8	Indet.	Indet.	Indet.	Indet.	Ox
497	201	5	4	2	0.8	Indet.	Crushed stone, CBDF	Indet.	Indet.	Ox
500	201	999	999	1	6.9	Wall	Crushed granite	Smooth	6 mm	Red (Ox)
501	201	6	13	1	0.5	Indet.	Indet.	Indet.	Indet.	Red
788	201	53	100	6	1.9	Indet.	Crushed stone, CBDF	Smooth	3 mm	Red

Tab. 8.2: Overview characteristics of the pottery from Mound 3. Explanation abbreviations: F.no. = find numbers; S = Feature number (*spoor* in Dutch); N = number of sherds; Wght. = weight in grams; Surf. fin. = surface finish exterior; Firing cond. = firing conditions. Explanation other abbreviations and codes: Indet. = indeterminate; CBDF = cannot be determined further; 999 = not applicable; Ox = oxidizing; Red = reduction fire. Other notes: 1.) when a number is listed with a pot section (for example 1 Rim), this means that the other fragments with the same find number cannot be identified. 2.) The firing circumstances are listed from the exterior surface to the interior surface: exterior – centre – interior. If only two variables are listed, the centre is included with the surfaces. If the firing conditions are listed between brackets (for example Ox (Red)) this means that the firing circumstances were primarily oxidising but that there are also reduction zones present and vice versa.

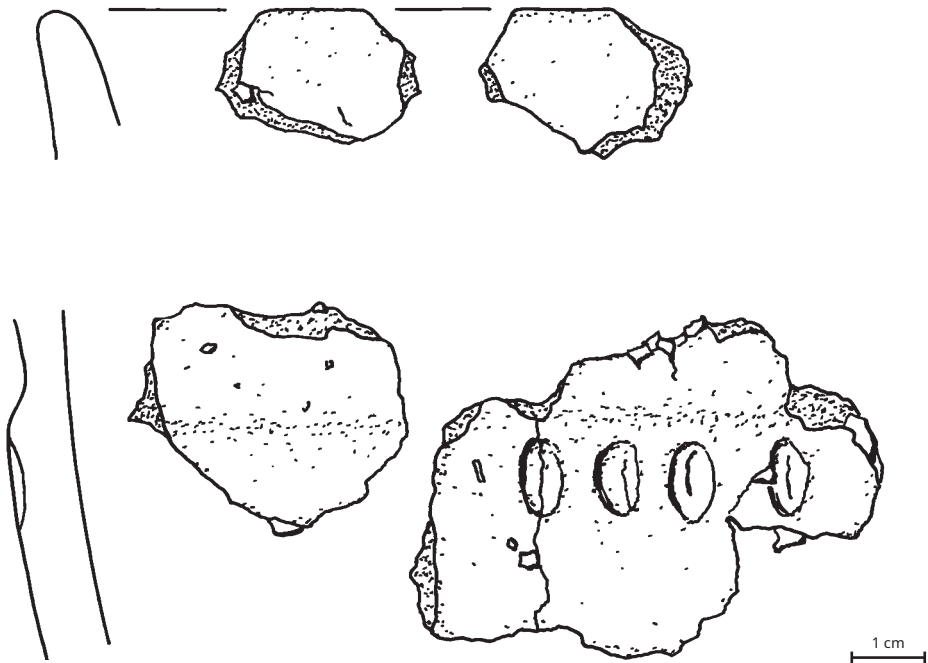


Fig. 8.22: Ceramics
Grave 4 (scale 1:1).

only on the weathered sherds. Also, the wall thickness remains the same for at least 2 centimetres underneath the fingertip impressions. The ceramic is tempered with very coarse quartz (2–8 mm) and the colour on both the interior and exterior surfaces varies between red-brown, light brown and grey. The ruddy colour on both the exterior surface and the broken edges appears to be caused by (partial) secondary burning. Despite the coarse temper, both surfaces are relatively smoothly finished. The very coarse ceramic indicates a date in the Middle Bronze Age. The row of fingertip impressions running around the pot at the height of the shoulder supports this. With regards to the latter, it should be noted that such rows of fingertip impressions running around the pot also occur during the Late Bronze Age. However, the combination of this decoration form with the coarse ceramic makes a Middle Bronze Age date the most likely.

8.4.2 Flint & stone

In total 22 find numbers were written out for finds from Mound 2 belonging the category ‘flint & stone’. Eight of these were discarded after analysis. With one exception, all remaining stone finds were from features. The various stone finds are discussed per context below.

Flint and stone from Grave 3

Two stone finds were done in the fill from Grave 3. Neither find was directly related to the grave. They were found because the entire fill of the grave was sieved. Such finds are present in the natural sub soil or around the surface and were found at locations that were sieved. It is

therefore not unlikely that similar finds would have been done if the surrounding square metres of Grave 3 had been sieved as well.

The first find is a small flint flake, or rather splinter (V237), of a light brown flint and measures 5 × 7 × 2 millimetres. Such splinters are typical waste products of flint knapping and can be transported over great distances underground through various taphonomic processes.

The second stone find (V243) was collected due to its peculiar concentric shape reminiscent of material related to metalworking. It is a broken fragment (maximum measurements: 20 × 12 × 6 mm) of something that had formed a shell (5 mm thick) around an object that has disappeared. However, it soon became clear that it was a typical so-called *klappersteen* (see Section 3.2). These occur plentifully in this area with pushed up river deposits. The small fragment from Grave 3 was likely present in the old pushed-up river deposits of the natural subsoil and will have ended up among the cremation remains of Grave 3 by accident.

Stone from Grave 4

The stone finds in the fill of Grave 4 do relate to the burial itself. The first of two find numbers (V497) was 3.9 grams of loose finely crushed quartz from the pot used to deposit the cremation remains in the grave. As was already noted (Sections 8.3.1 and 8.4.1), this pot was in extremely poor condition as a result of burning and the strong degree of soil processing. The loose quartz underlines the possibility that the pot was deposited in a far more complete state than it currently is, but partially disintegrated.

The second find number (V42) likewise concerns an interesting phenomenon. The sieved fill of the burial put yielded three pieces of quartzitic sandstone (together 84.6 gr.) that show exactly the same fracture patterns as the stones recovered from the pit row underneath Mound 1. As was already argued, such sharp and angular fracture planes can only result from heating to a high temperature followed by rapid cooling (see Section 7.4.2 for a more elaborate explanation). Given that Grave 4 dates to the same period as the pits underneath Mound 1, the three stones could be silent witnesses of a comparable, if difficult to comprehend, ritual.

Concentration of flint on the old surface (S7)

The concentration of flint found at the depth of the old surface consists of ten fragments. Four of these fragments (V49, V51, V55 and V59) are cores of different kinds of flint. The original (small) nodules of flint will have been locally collected as such flints are common in the pushed-up old river deposits that make up the Veluwe ice-pushed ridge. The flint varies in colour from light grey-brown to homogenous grey. The maximum lengths of the small cores are quite close together: 26 millimetres (V49), 30 (55) and 32 millimetres (V51 and V59). One of the cores (V59) was clearly bipolarly knapped using an anvil (Fig. 8.23).

After refitting the remaining six fragments turned out to originate from two nodules. The two fragments listed under find numbers V50 and V53 fit together and form part of the exterior of the original nodule, likewise rolled flint from the moraine. The colour (homogenous grey) of the flint is very similar to one of the cores (V49). Initially V50 was interpreted as a flake, but later turned out to

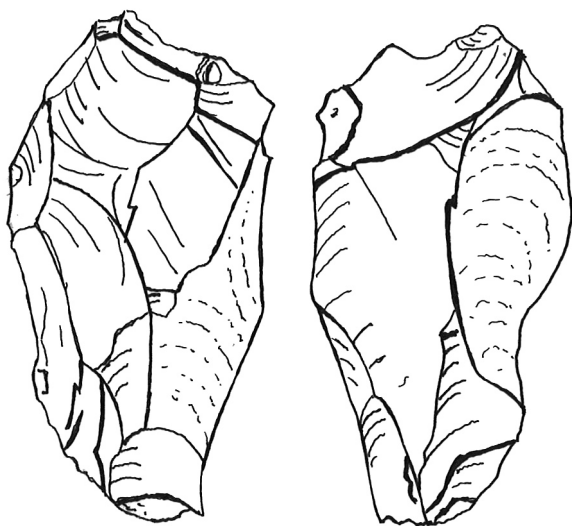


Fig. 8.23: Bipolar core (V59) from S7 (scale 1:1; drawing: Arjan Louwen).

have flaked off the other fragment (V53) through freeze-thawing. While the splitting of these fragments has a natural cause, both fragments were collected and left with the other eight flint fragments of S7.

The final four fragments (V38, V48, V52 and V54) together formed part of (80 × 48 × 32 mm) the exterior surface of a pockmarked module of dark grey, rolled and poor quality flint full of chalk inclusions. Nonetheless, both a whole side and the small core of the original module are missing, presumably because the knappers were able to obtain a usable flake from the core.

The various flakes and cores were not worked where they were deposited, as small flakes and splinters are not present. The random collection of flint was intentionally left on the old surface in this configuration. The apparently opportune manner in which this flint was locally collected is entirely consistent with Bronze Age 'ad hoc' technology (Van Gijn/Niekus 2001, 307).

Granite muller

While digging Level 7 a fragment of a granite grinding stone was found (V609). It is a round muller the size of a fist (intact cross-section: 86 (width) x 58 mm (height); broken cross-section (length): > 72 mm). The natural surfaces are smooth and round. Two sides are flat and slightly roughened. Microscopic research did not yield much detailed information except that the stone was (not intensively) used to grind up a mineral or hard plant material.

8.4.3 Worked animal bone

Worked animal bone was found in Grave 4 (S4) and Grave 6 (S13). The bone material survived as it was burned on the pyre. None of the objects were recognized in the field: they all came to light during the physical anthropological analysis of the cremation remains.

A bone (cloak) pin or awl from Grave 4

Among the cremation remains of Grave 4 was a long, flat and hollow piece of bone (V163; Figs. 8.24 and 8.25), of which one end has been ground to a point. The other end had been shaped to a semicircle. The object is 81 millimetres long and the maximum width is 12 millimetres. It is not unlikely that the object shrunk a little as a result of being burned. It was probably made from a piece of a rib from a middle-large animal (sheep/goat or boar?). Use-wear analysis yielded no results as the object is completely weathered as a result of burning.

The shape of the object is reminiscent of several different things. For example, it is well possible that it is a (cloak) pin or closing. It is however also possible that this object is an awl. If it was a (cloak) pin or closing, the object may have been part of the clothing or shroud that was worn/covered the deceased female during cremation. If it is an awl then



Fig. 8.24: Bone pin (V163).

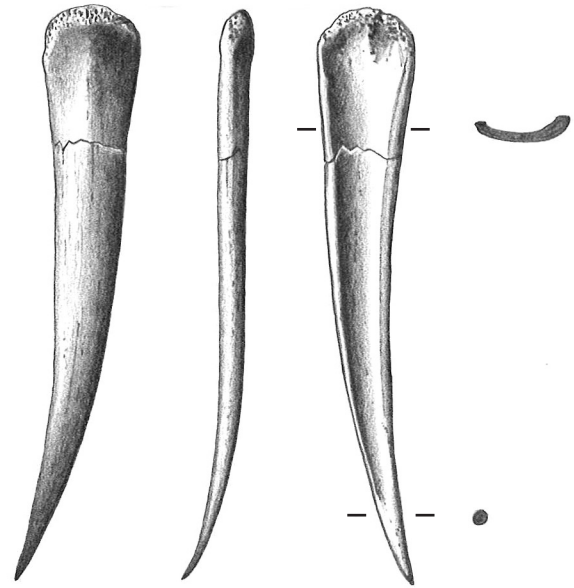


Fig. 8.25: Bone pin (V163; scale 1:1).

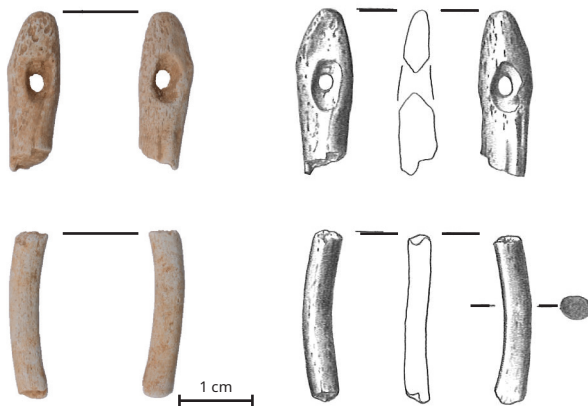


Fig. 8.26: Bone needle (V515).

Fig. 8.27: Bone needle (V515; scale 1:1).

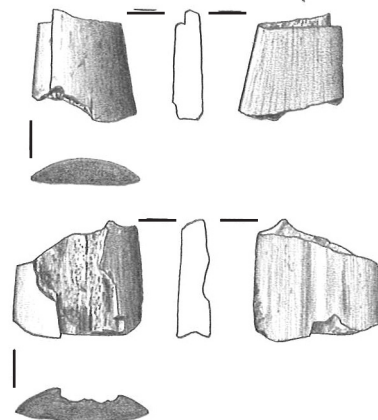


Fig. 8.28: Worked animal bone, function unknown (V501; scale 1:1).

that would make it a tool that was deliberately placed on the pyre, and eventually was collected, intentionally or otherwise, and deposited in the grave.

Lastly, a number of other fragments of animal bone were found in Grave 4 that could not be further identified (also V163).

A bone needle from Grave 6

Two fragments of a bone needle were recovered from the cremation remains of Grave 6 (V515, Figs. 8.26 and 8.27). The interpretation of this object as a needle is based on the presence of an intact thickening at the end of one of the fragments with a biconically drilled hole. Furthermore, both fragments are long and thin (round cross-section of 4 mm). It should be noted that the point

of the needle was not recovered. Microscopic research by Van Gijn and Verbaas (see App. 2) established that the eye only shows very light use-wear traces. The second fragment, part of the actual needle, however, shows heavy use-wear traces of more frequent use. This second fragment is also slightly bent, and this curved shape is probably the result of burning. The use-wear traces described are consistent with use as a needle: the needle itself must have been in frequent contact with cloth, while the thread in the eye only lightly rubbed up against the edges of the eye. The gloss on the needle is not consistent with contact with plant material or hide, which makes it tempting to assume it was used with wool. However, this cannot be supported with concrete observations.

Other fragments of worked animal bone were also found in this grave (V501, Fig.8.28). However, it was unfortunately not possible to determine what kind of object these fragments were originally from.

8.5 Phases and dating

As with Mound 1, a number of flints were found on the old surface underneath Mound 2, which may predate

the erection of the barrow. The flint from S7 possibly dates to the period immediately preceding the mound's construction. There are no other indications of this location being used prior to the erection of Mound 2.

This brings us to the barrow itself. In total there are nine ¹⁴C-dates available for the seven graves (Fig.8.29) found in the southwest quadrant. These all clearly point to a date in the Middle Bronze Age A for the barrow (see

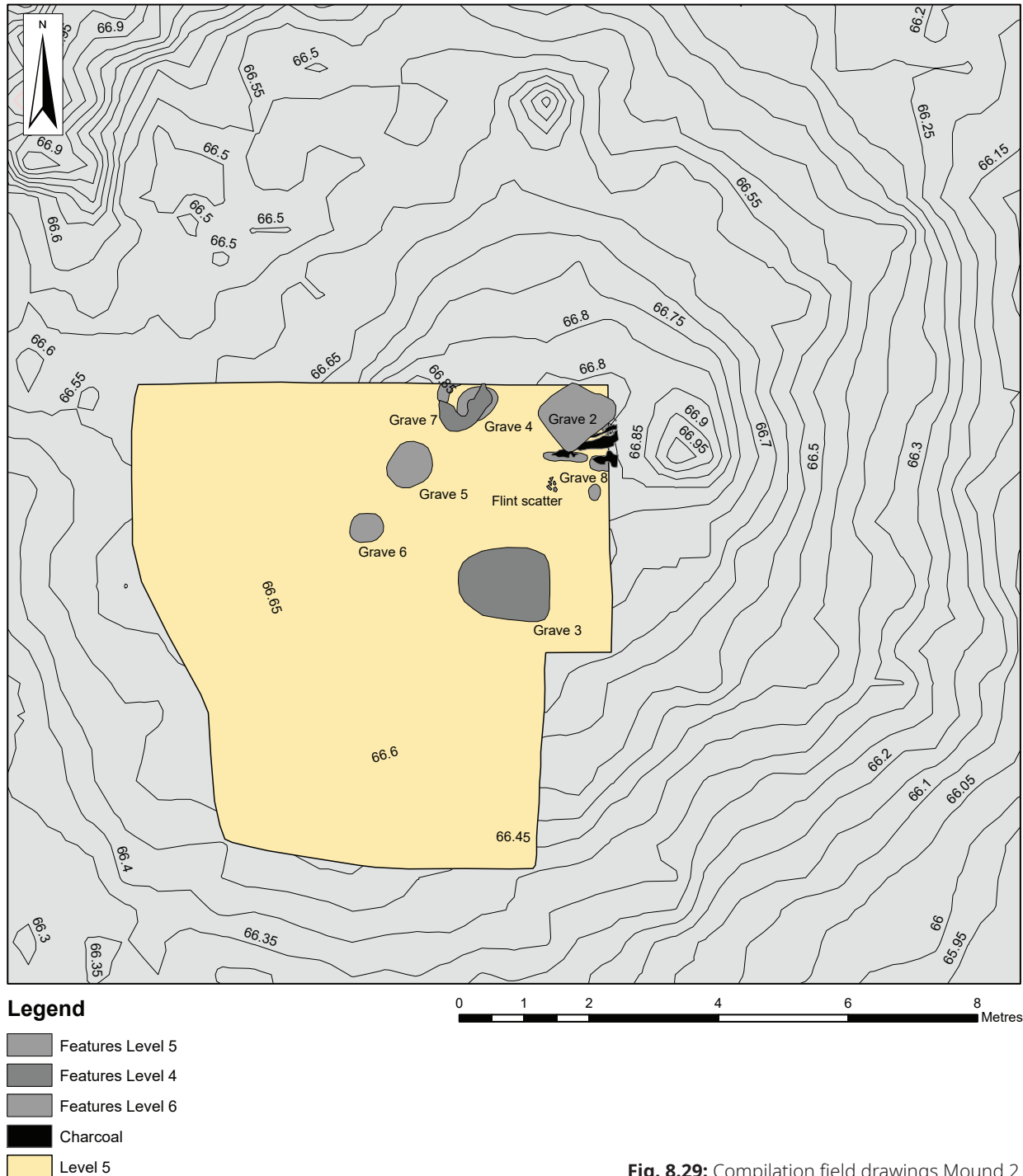


Fig. 8.29: Compilation field drawings Mound 2.

Context	Feature no.	Find no.	Lab code	BP	Cal BC 1σ (68.2)	Cal BC 2σ (95.4%)
Grave 2	201.2	20	GrA-51581	3280 ± 35	1611–1518	1636–1460
Grave 3	201.3	123	GrA-51707	3275 ± 30	1608–1511	1626–1462
Grave 4	201.4	291	GrA-51942	3315 ± 30	1629–1534	1665–1510
Grave 5	201.8	273	GrA-51700	3295 ± 35	1615–1530	1660–1499
Grave 6	201.13	522	GrA-51587	3380 ± 35	1734–1630	1762–1562
Grave 7	201.15	471	GrN-32578	3295 ± 15	1611–1535	1621–1526
Grave 7	201.15	471	GrA-51712	3285 ± 30	1611–1529	1629–1500
Grave 8	201.22	672	GrN-32581	3345 ± 20	1662–1616	1728–1546
Grave 8	201.26	828	GrA-51702	3280 ± 35	1611–1518	1636–1460

Tab. 8.3: ¹⁴C-dates of the graves in Mound 2. See also Table 2.1.

Tab. 8.4). The dates, however, are so close together that it is impossible to reconstruct a reliable sequence of events for Mound 2 based on these dates alone. Moreover, determining this is further complicated by the not always clear stratigraphic position of the graves (Tab. 8.4). In any case, it is clear that Grave 8 is covered by the mound body and therefore predates its construction. Graves 2, 4 and 7 were dug into the barrow and are therefore secondary burials. How Graves 3, 5 and 6 relate to the mound body, however, is harder to determine. These three graves were found far from the centre of the mound and only became visible at the depth of the old surface or deeper. In none of the three cases was a pit cut visible above the old surface. As already noted, the subsoil at the Wieselseweg is strongly homogenized and due to the soil formation processes that occur more strongly at the edges of an inclined surface such as a barrow, it is entirely possible that a pit cut would have disappeared. Graves 3 and 5 as such could still have been dug through the mound body. Grave 6, however, was located so deep underneath the old surface that this seems very unlikely. We therefore should take into account that there may never have been pit cuts and that these graves were also covered by the mound body. Given the careful manner in which the excavation levels were dug, we favour the latter option. This means that Graves 3, 5 and 6 could predate the construction of the mound body.

With the exception of the various 20th century plough furrows, no other anthropogenic features were encountered in the southwest quadrant that could post-date the Middle Bronze Age A.

8.6 Conclusion

8.6.1 Burial mound or cemetery?

For Mound 2, Grave 8 at first glance appears to qualify as the so-called ‘primary central grave’. This grave is clearly located in the centre of the mound and is covered by the mound body. In the case of Mound 2, however, there are a further three burials (Graves 3, 5 and 6) that likewise appear to be covered by the mound body. In short, the southwest quadrant of Mound 2 alone already yielded four

	Prior to erection of the mound	Secondary burial	No stratigraphic relationship	Relationship unclear
Grave 2		X		
Grave 3				X
Grave 4		X		
Grave 5				X
Grave 6			X	X
Grave 7		X		
Grave 8	X			

Tab. 8.4: Graves Mound 2 in relation to the mound body.

graves that all could predate the erection of the barrow. The question that arises is whether Mound 2 was erected as a monument solely for Grave 8 or whether Mound 2 fulfilled this function for a small grave field in its entirety. In light of these findings, we must once again question what exactly a barrow represented and meant to Middle Bronze Age society. In this case, was it a marking of a grave or was the erection of a mound body an act that went with a certain use-phase of a cemetery?

8.6.2 The burial ritual

Even though all graves found in and underneath Mound 2 were cremation burials, there are also some differences identifiable in the nature of the graves, which in turn indicate differences in funerary ritual. For Mound 2 at least three ‘forms’ of graves can be distinguished, with nuanced differences between them. A first form is characterized by the presence of the remains of a pyre. For this form of burial the cremation remains were searched through with care and buried in a (small) pit, after which the selected remains of the funerary pyre were used to cover the burial pit. For Mound 2 only Grave 8 was created in this manner. A second form is bone scatters or bone packings in a fair-sized pit (50–100 cm in cross-section). Graves 3, 5 and 6 belong in this category of burials. It is furthermore striking that it is exactly these three graves that are suspected to predate the erection of the barrow. The last burial form



Fig. 8.30: Visualization of Mound 2. The white figures represent the individuals identified through the excavation. Figure by S. van der Vaart-Verschoof.

that can be distinguished for Mound 2 is a shaft or pit dug into the mound body, in which cremation remains were deposited. Graves 4 and 7 belong to this form of burial, but was too heavily disturbed to make any definitive interpretations. Within these three forms of burial there are also minor differences, such as the incidental presence of pottery funerary goods (Grave 4) and bone objects (Graves 4 and 6). It is worth noting that bone grave goods were found only in female burials and in both cases it is possible that they were fine tools used to work textiles. It

is also possible, however, that the object in Grave 4 was a personal ornament such as a (cloak) pin or closing.

The fact that the dates for the various graves in Mound 2 are so close together, makes it likely that the people buried in Mound 2 belonged to the same community, and may even have known each other (see also Bourgeois/Fontijn 2015). While the above mentioned differences between the graves can be noted, fact remains that they are *all* cremation burials created in or under the same barrow. The roles fulfilled in life by the deceased may account for the variations in burial form and grave goods.

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