

SCHEEMDA, THE WOOD REMAINS OF THE DROWNED VILLAGE AT THE 'OUD KERKHOF' SITE

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ABSTRACT: The excavation of the late-medieval churchyard of the drowned village 'Old Scheemda' yielded remains of construction wood, a hedge, graves, a few wheels, household items and tools. Among a total of 117 pieces of wood only 8 wood species were encountered. *Quercus* is the predominant species, followed by *Betula* and *Alnus*; the latter species is remarkably scarce. There is evidence of the imported wood species *Pinus* and *Picea* being used at medieval Scheemda.

KEYWORDS: Scheemda, churchyard, Late Middle Ages, wood remains.

1. INTRODUCTION

This late-medieval site 'Oud Kerkhof' near Scheemda, province of Groningen, produced 117 pieces of wood. Given the total extent of the excavation this is remarkably little. This can primarily be attributed to the specific function of the site: a churchyard with the foundation remains of two churches, a tower, the wall of the churchyard and the surrounding moat (Molema, 1990). Habitation remains such as house sites were virtually absent. Despite the generally good preservation potential of the soil – peat and clastic sediments – much of the wood had decayed. The poor yield in wood means that this paper can give only an incomplete overview of the wood species used and a fragmentary picture of the use of wood.

The excavated wood remains were identified and documented; if possible the function of the object was indicated. These data together form the wood catalogue. On the basis of this information the wood spectrum (table 1) will be discussed and comments are given concerning the use of the wood. Finally some remarks will be made about the origin of the wood.

2. FIND SPOTS AND DATING OF THE WOOD REMAINS

The wood remains originate from the foundation trenches of both the wall of the churchyard and the two churches ('early' in the wood spectrum), from the fill of the moat ('late') and from grave pits ('cemetery'). Wood, found in some of the pits or in the exposed surface cannot be dated more accurately than '13th to 16th century', i.e. the total occupation period of this area. The early dating means AD c. 1200-1270; the late dating covers the last few decades before the church

and cemetery were abandoned, c. 1450-1509. The cemetery was established very probably after 1270 and continued in use perhaps to 1509. The burials cannot be dated more precisely. Only from the wood remains illustrated in this paper will the find spot be given.

3. THE WOOD SPECTRUM AND THE WOOD SPECIES USED

Only eight wood species are encountered (table 1), remarkably fewer than the number of tree species in the natural vegetation of this landscape and also much fewer than generally presented in late-medieval wood spectra of other sites. Many wood species are not preserved as the consequence of strong weathering and decomposing conditions, by which especially the soft wood species quickly vanished. This will be the principal explanation of the high percentage of *Quercus*, undoubtedly growing in the surroundings and, as hard wood, standing the best chance of preservation in the soil. Besides, it was probably also the most frequently used wood species. In general, *Fagus* is present in wood spectra only in small numbers; the same holds for *Fraxinus*; the minimal frequencies of these two wood species do not permit conclusions concerning the specific use of this wood. *Alnus* must have been abundantly present in this region, much more than the low values for this species indicate. Most of the alder wood used clearly has decayed. *Betula* will have had good habitats in the local peaty soils, thriving largely in felled forests, on shallow fields and in abandoned dwelling places. Generally this wood species is not found in great numbers; it is a very soft wood. In this respect the site of Scheemda is somewhat exceptional, as will be explained below. *Salix* can grow very well in many types of nutrient-rich ruderal places. It is not clear

Table 1. Scheemda, 'Oud Kerkhof'. Wood spectrum.

	'Early' (1200-1270)	'Late' (c. 1450-1509)	13th-16th century	Cemetery	Total
<i>Quercus</i> (oak)	15	24	19	21	79
<i>Fagus</i> (beech)	–	1	2	–	3
<i>Fraxinus</i> (ash)	2	1	2	–	5
<i>Alnus</i> (alder)	2	–	2	5	9
<i>Betula</i> (birch)	2	3	9	–	14
<i>Salix</i> (willow)	1	1	–	–	2
<i>Pinus</i> (pine)	–	1	–	–	1
<i>Picea</i> (spruce)	–	2	2	–	4
Total	22	33	36	26	117

whether this species was intensively exploited, though one might expect it to be, especially for wooden shoes, basketry and small utensils. *Pinus* and *Picea* both are imported wood species, originating probably from Scandinavia or the Baltic region. The division of the wood spectrum into 'early' and 'late' was primarily made in order to pinpoint the earliest use of imported wood. This will be further explained in the next section.

The wood spectrum gives no insight into the extent of wooded areas in the surroundings of Scheemda, nor into the forest composition, and only very limited information on the provenance of the wood species. In Section 5 some attention is paid to some of these subjects.

4. THE USE OF THE WOOD

4.1. Building and construction wood

Quercus was frequently and perhaps predominantly used. Over 40 of the 79 finds of oak wood (table 1) certainly or probably concerned construction wood. It is not known whether wooden or half-timbered houses were present. Oak posts (fig. 1) with cross-sections of c. 15x10 cm suggest the presence of such buildings. On the evidence of the pointed ends, the sizes and the state of preservation of the wood, two or three rows of posts can be distinguished, though their constructive relationship is not clear. In one row a post of *Fraxinus* was found. The posts are situated within the ground plan of the first church (Molema, 1990: fig. 5). Given the sizes of the posts it is very unlikely that they represent a church.

A number of boards made of *Quercus* wood, 10-15 cm wide, including some boards with moulding and feather-and-groove boards (fig. 2), were also found, as well as some laths and fragments of panels. The thickness of the latter mostly was less than 1 cm. Part of the wood shows weathering, characteristic of wood used out of doors. *Fagus* also was used. The timber of beech wood, partly also feather-and-groove boards, had not rotted.

This was very probably used indoors. Some severely weathered fragments of *Alnus* and *Betula* timber may have been used as construction wood. *Picea* also was used as construction or building wood, probably out of doors, given the badly weathered condition of the wood found here. The *Pinus* find is a fragment of probably a piece of ornamental carving (fig. 3), carefully finished. This piece was preserved unweathered; very probably it was used inside a house. The wood spectrum does not reveal whether this was imported in the 13th century; see also section 5.

Most of the construction wood gives the impression of being demolition debris. This is one of the reasons why no more than an odd piece of wood can be dated with any accuracy within the total occupation period from the 13th to the 16th century.

4.2. Gardens

A large number of small trunks of *Betula*, measuring c. 4 cm in diameter, have been found in one of the pits. In view of their shape, these are the remainders of a frequently pruned hedge. This hedge evidently had been cut down after 18-20 years. These trunks are represented by four wood identifications in the wood spectrum. A branch of *Quercus*, with a diameter of 2.2 cm, was also found, together with a somewhat thicker branch of *Fraxinus*, which was partly charred. It is unclear whether the latter species grew here as a tree.

The garden aspect and indications for the presence of trees in the excavated area are remarkably poor in the wood remains found here. There are no data indicating extensive growth of trees at this large and mostly unbuild site. This is different from what we see in most present-day churchyards.

4.3. Cemetery

In six graves wood remains were found. Coffins were absent. In the grave-pits usually only a cover was present, fitted just above the body and supported by a thin beam of *Quercus*. The wood species used for the



Fig. 1. Post of oak wood. Trench C, level of excavation. Scale 1:5.

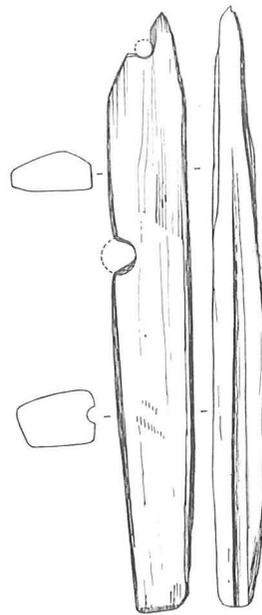


Fig. 2. Feather-and-groove board of oak wood. Trench E, fill of the moat. Scale 1:5.



Fig. 3. Fragment of ornamental woodwork, pine wood. Trench D, level of excavation. Scale 1:2.

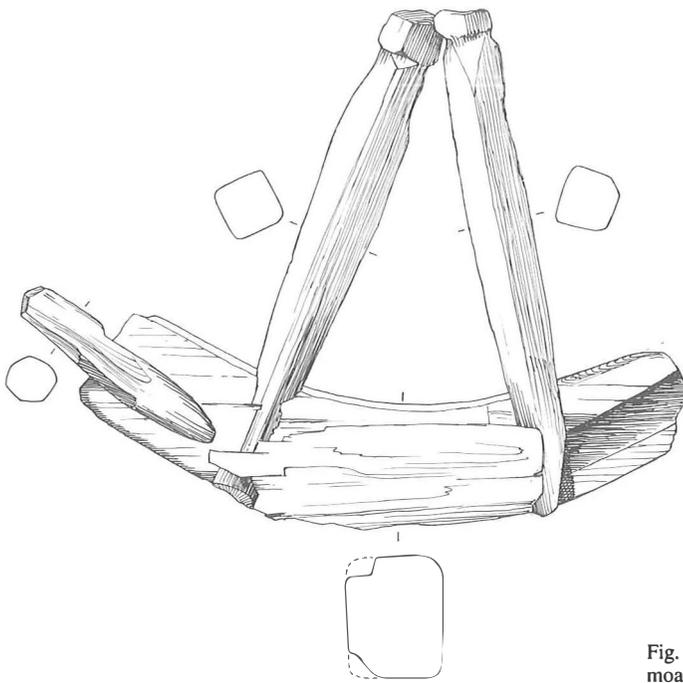


Fig. 4. Fragment of a spoked wheel of oak wood. Trench E, fill of the moat. Scale 1:5.

burials are *Quercus* and *Alnus*. For the covers remarkably thin wood was used; the timber was about 1 cm thick. In one case the cover was constructed of a number of planks, each c. 11 cm in width.

Regarding the direction of the graves, two orientations can be distinguished. In the SW-NE graves (Nos 11, 12, 13) *Alnus* is present; the burials with a somewhat more W-E orientation have wood only of *Quercus*. This may indicate different units in the churchyard. In one grave with a cover of *Alnus* wood (No. 11), handles and planks of *Quercus* were found, perhaps the remnants of an older, cleared inhumation in a coffin.

The remarkably thin wood of the covers and the absence of coffins indicate the scarce use of wood. It cannot yet be concluded from the available data whether this was a question of scarcity of wood or perhaps the poverty of the local population.

No remains were found of any structures in the cemetery.

4.4. Vehicles

A spoked wheel with an *Alnus* felloe and spokes of *Quercus* can be dated 'early', perhaps to the end of the 13th century. The diameter of the wheel was about 0.7 m. Of another spoked wheel, dated 'late', felloes, felloe-pins, spokes with a square cross-section and spoke-wedges were made of *Quercus* (fig. 4). The diameter of this wheel was also about 0.7 m. The naves of the wheels were not found. Both wheels are of the flat-spoked type. There is no evidence of cambered wheels with sloped spokes before AD 1200 (Hayen, 1986: p. 138; 1987: p.

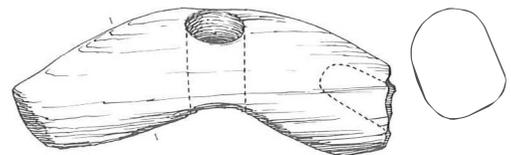


Fig. 5. Fragment of felloe of spoked wheel of oak wood. Trench E, fill of the moat. Scale 1:5.

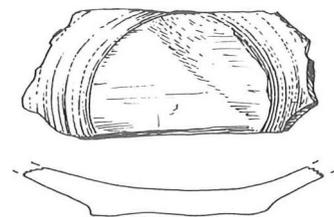


Fig. 6. Base fragment of a turned bowl of alder wood. Diameter of the bowl c. 16 cm. Trench E, pit 2. Scale 1:2.

214). The latter type is somewhat less susceptible to cracking than the older type, present in Schemda. The piece of felloe, illustrated in figure 5, is a severely worn part of a spoked wheel of *Quercus*, with a diameter of c. 0.8 m. It cannot be made out whether this was of the flat-spoked type.

We can interpret these pieces of wheels as parts of carts or wagons, without doubt used in this settlement.

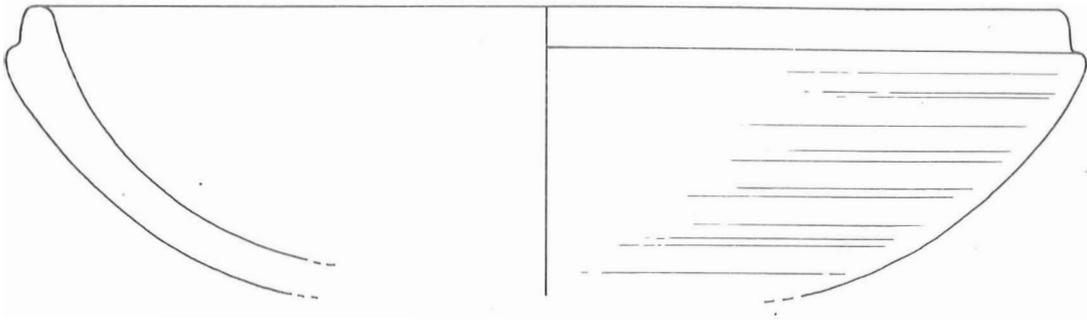


Fig. 7. Turned bowl of alder wood. Diameter c. 29 cm. Trench E, pit 2. Scale 1:2.

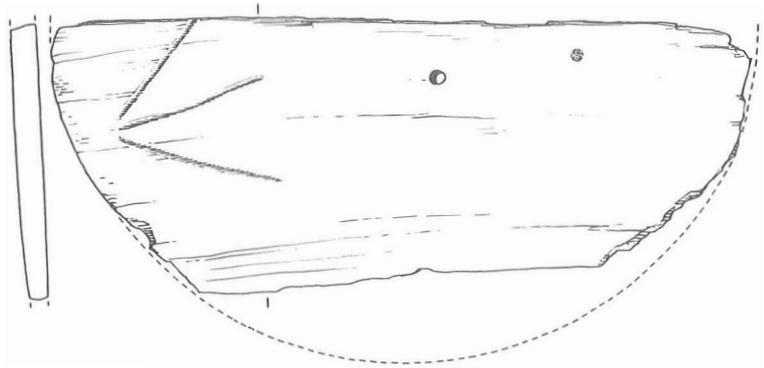


Fig. 8. Part of the bottom of a stave vessel of oak wood, with house mark. Trench D, excavation level. Scale 1:5.

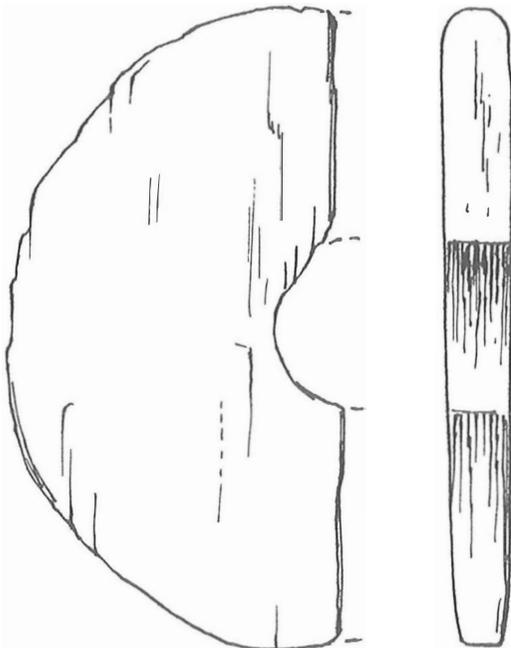


Fig. 9. Part of a disc of oak wood with a central hole. Trench C, fill of the moat. Scale 1:2.

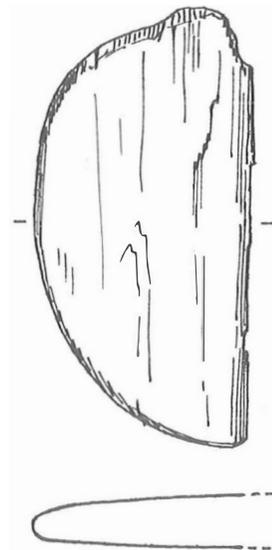


Fig. 10. Part of a (probably) circular disc of oak wood. Trench C, pit in front of vertical section no. 2. Scale 1:2.

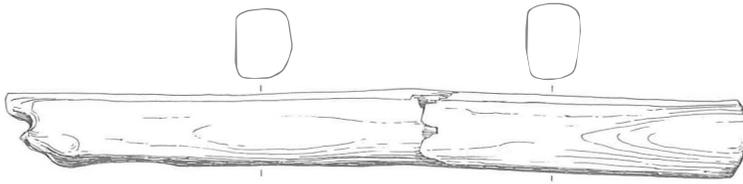


Fig. 11. Handle or shaft of ash wood. Trench E, pit 2. Scale 1:5.

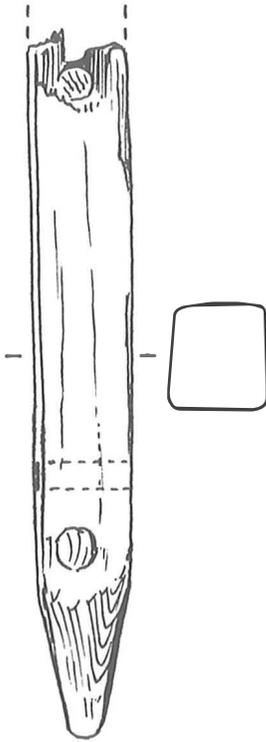


Fig. 12. Broken part of a pointed object of unknown function. Into the drilled holes small pegs were inserted. All made of oak wood. Trench E, pit 1. Scale 1:1.

4.5. Household items

The turned bowl of *Alnus* wood of which a bottom fragment was found (fig. 6) had a diameter of 16 cm at most; a fairly small bowl. The base diameter of 4.7 cm is characteristic of medieval bowls. Bowls of this type are known from many late-medieval cities in the Netherlands and other countries. In the Netherlands, find-spots include Amsterdam (Baart et al., 1977: pp. 345-350), Dordrecht (Sarfati, 1990: p. 112), Groningen (Casparie, 1990: pp. 112, 122) and Zweins, Friesland (Casparie, 1988: p. 173). An excavation in 1961 in the city of Utrecht uncovered a turner's workshop, dating to the 13th century, in which the same type of bowls were manufactured (pers. comm. H.L. de Groot, Utrecht). The second bowl, depicted in figure 7 and also made of *Alnus* wood, has a diameter of 29 cm. Its bottom has not

been preserved. The rim indicates the possible presence of a lid. Bowls with such a rim have only seldom been found. Both are very probably local products; they are the only examples of turned woodwork.

Half a bottom of a stave vessel, made of *Quercus*, with an incised house mark which could not be interpreted (fig. 8) was found in the fill of the moat. The diameter is c. 0.50 m. This type of artifact is not unusual in a medieval context. It indicates the use of a stave vessel with a height probably exceeding 1.50 m. Vessels of this type are frequently reused as well-shafts. At Schemda such a water well has not been found.

Among the household items may also be reckoned a small number of handles or shafts, made of *Quercus*, *Fraxinus*, *Betula* and *Salix*. Their diameter is mostly somewhat more than 2 cm. The length, if entirely preserved, may exceed 0.40 m. In none of the cases is it clear to what kind of objects these handles belonged.

Fragments of artifacts, made of *Quercus* wood and perhaps belonging to household items are shown in figures 9 and 10. The objects were definitely not used outside the house. Their function is unclear.

As could be expected, this excavation yielded only very few artifacts belonging to the category of household items. This largely explains the low number of different wood species identified at this excavation. In general this find category displays the greatest variety of wood species.

4.6. Tools

The artifact shown in figure 11 and made of *Fraxinus*, is broken at one end. It could be the grip of a small vehicle, like a handcart or of a stretcher. Its shape and its cross-section of 5x3.5 cm make it unlikely to be an axe handle. The small object illustrated in figure 12 and broken on one side, was carefully made of *Quercus*. In three spots a small hole had been drilled. Three minute pegs also made of *Quercus* had been inserted. The object is thought to be part of a tool of unknown function.

4.7. Unknown

Chips and other pieces of *Quercus*, *Betula* and *Salix* are undoubtedly parts of structures or utensils. The oak object shown in figure 13, with a cut constriction at the obtuse end is a case in point. Further identification is not possible. Figure 14 shows a roughly faceted disc made of oak wood with a drilled hole. Its function is unclear.

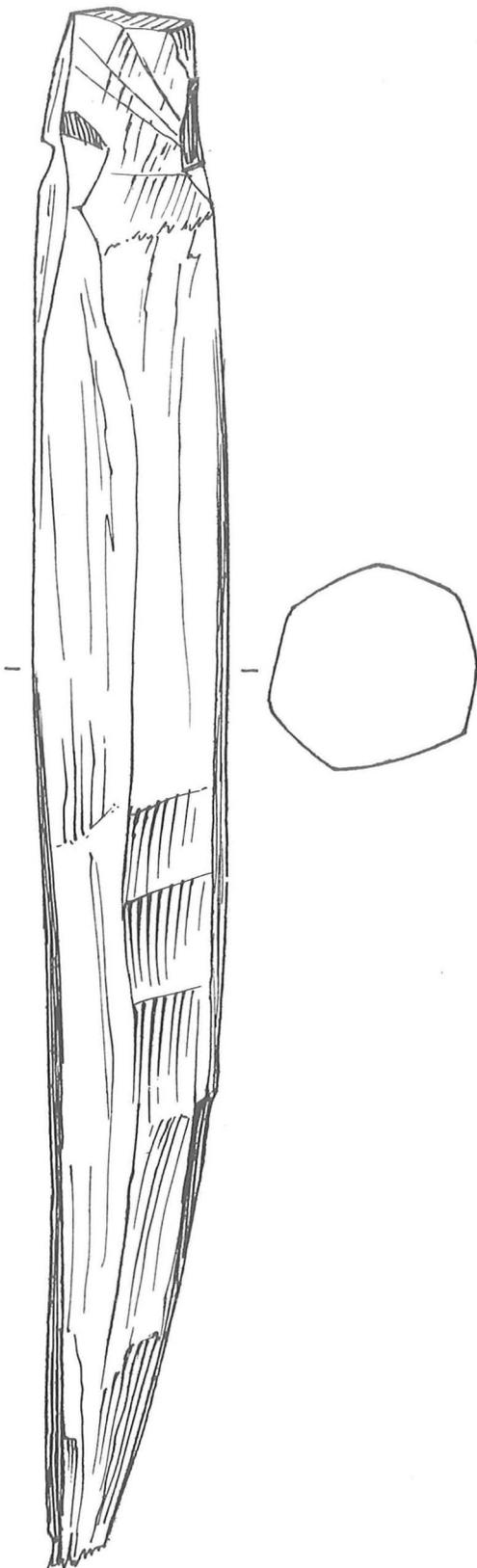


Fig. 13. Pointed object of oak wood, perhaps a wedge or tent-peg. Trench C, pit next to the churchyard wall. Scale 1:2.

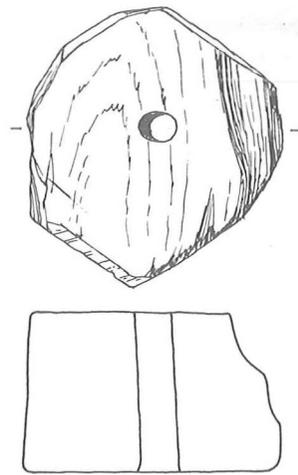


Fig. 14. Roughly faceted disc of oak wood with a drilled hole. Trench E, pit 1. Scale 1:2.

5. THE ORIGIN OF THE WOOD

The type of landscape suggests that the Scheemda region was poor in forest, but it is not clear if it was poor in trees. Very probably enough wood was available in the immediate and wider surroundings to fulfil at least part of the wood requirements. *Quercus*, the predominant wood species in use for the construction of buildings, will have been cultivated. Examples of forestry dating back as far as late-medieval times are documented (Vink, 1990), but at Scheemda it is not proven. The oak posts were cut from well-grown, mature trees. Where these trees were grown and how forestry was practised is unknown, but very likely it was not on the drained peat soils. *Fagus* did not occur in the natural vegetation in the surroundings of Scheemda in such numbers as to make it attractive for commercial purposes. The wet, peaty landscape is an unsuitable habitat for this tree species. Though beech was present as timber, it very probably was imported over a somewhat larger distance, e.g. from the boulder-clay area of the Drenthe Plateau, about 50 km to the SW.

Fraxinus generally is present in small numbers in many sites; it was mostly used for handles and shafts. In Scheemda one post made of ash wood is found. This indicates that the ash grew at not too large a distance from the settlement, very likely on the damp Eems clay soils, present at roughly only 500 m north of the site, and around the boulder-clay 'peninsula' of Winschoten.

The scarce occurrence of *Alnus*, already mentioned before, is somewhat surprising. In the surrounding good habitats were abundantly present on the damp to wet, peaty to clayey soils. Moreover, in many sites alder, after oak, is the second most frequent wood species encountered. This is not the case at Scheemda.

The presence of *Picea* and *Pinus*, probably imported from Scandinavia or the Baltic region has already been

mentioned. The former was clearly used as timber or construction wood. This may indicate a certain scarcity of oak for timber and construction purposes in this region during the use of the churchyard. The available data provide information too poor to permit conclusions about this. At a number of sites in the northern Netherlands use was made of this imported wood as early as the 14th century. Here and there these wood species were used even in the 13th century, e.g. in and around the city of Groningen. It cannot be demonstrated that this was also the case at Scheemda. In the wood spectrum (table 1) these two wood species are absent in the early period; the available data are too poor to give much weight to this finding.

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