Summary
This study looks at the long-term history of the Eastern Netherlands cultural landscape, with a particular focus on the microregion of central Salland. A key question is how the study results can help us to better understand long-term historical processes in relation to transformations in the cultural landscape during the period of study. Excavations, most of them carried out in the past two decades, constitute the principal source material. Physical-geographical and historico-geographical studies have also been used. The study describes the long-term history – from the Middle Iron Age to the High Middle Ages – of the coversand areas known today as Salland, Twente and the Achterhoek (in the provinces of Overijssel and Gelderland). In many respects the Eastern Netherlands can be characterised as a frontier region. The study region was located in a frontier region from the Iron Age until the Early Middle Ages, initially wedged between two cultural groups and later occupying the periphery of the Roman empire. During the Early Middle Ages it lay on the fringes of the Saxony sphere of influence.

Chapter 1 places the research topic in context and examines the theoretical background. Our point of departure is a methodology that is midway between a top-down and a bottom-up approach. This is achieved by incorporating recently acquired insights from paleo-ecological studies of the physical landscape, where possible in conjunction with models designed to analyse the mental landscape. During the past fifty years archaeologists have arrived at different views of landscape development. Whereas the initial focus lay on the study of material culture (interpreting cultures on the basis of their material manifestations), the results of paleo-ecological studies began to predominate in models from the 1970s. This ecological determinism offered little scope for changes of a more cultural nature elucidated through anthropological studies. From the late 1980s a mode of thinking known as the historico-anthropological approach prevailed. It assigned considerable prominence to what landscape might mean to local groups and to continuity of meaning (including in terms of a landscape’s cultural biography) but made little use of paleo-ecological research findings. This is regrettable because, if interpreted at a microregional level, such findings are an indispensable supplement to the settlement models constructed in the previous period. It is particularly the many detailed studies relating to paleo-ecology and the physical sciences, carried out in the past decade by archaeologists under the Malta Convention, which provide enormous opportunities in this respect. A closer look at the abiotic landscape of the Eastern Netherlands reveals the great variation in composition and possibilities for use. We then ask to what extent it is possible to compare the settlement history of different pleistocene landscapes and whether models developed in connection with studies conducted elsewhere can be used to analyse data from the Eastern Netherlands. This is a key theme of the present study.

Chapter 2 investigates the extent to which the Eastern Netherlands has developed its own research tradition and just what this entails. We present an overview of how archaeological research has evolved here since the 19th century. We then describe the development and make-up of the Eastern Netherlands sandy landscape. Although professional archaeologists regularly displayed an interest in the Eastern Netherlands in the period leading up to World War II, it is clear that they largely avoided the region after the war. The lack of regional projects by Dutch universities, which had built up a considerable reputation in this field, most notably in the 1970s and 1980s, was only partially compensated for by the work of provincial archaeologists at the State Archaeological Service (ROB). As a consequence, studies in the Eastern Netherlands were much less theoretically based than elsewhere. Not until the 1990s, in the wake of the Malta Convention, did this situation begin to change. Since then archaeological research in the Eastern Netherlands has rapidly made up for lost time and several sizeable research projects have laid the foundation for a research tradition. The focus of these projects is the relationship between landscape and settlement, with a particular emphasis on paleo-ecology and, where possible, historical geography: they are less concerned with developing historico-anthropological models.

The strong emphasis on the abiotic aspect of landscape is probably due to its fragmented and varied character. Of all Dutch sandy landscapes, the Eastern Netherlands is the most varied in composition and external manifestations. Although almost the entire area is covered with a layer of coversand, soil genesis studies allow us to distinguish between landscape regions in which old plateau and terrace remains, push moraines or coversands played a major formative role. In this respect these areas differ from regions where large scale coversand islands are the norm. This calls for a critical evaluation of the usefulness of models developed to interpret archaeological data from large-scale sandy landscapes. This is not to say, however, that it is impossible to develop models at the regional or supra-regional level within the Eastern Netherlands.

Chapters 3 to 5 present data and settlement histories for the following periods: from the Middle Iron Age until Early Roman times, from the Middle and Late Roman period, and from the Early and High Middle Ages. The introductory sections of each chapter examine the current state of knowledge for these periods. Find sites in the study region are then described in greater detail and we look at the implications of these findings for our picture of the Eastern Netherlands in the period in question.

Chapter 3 explores the extent to which the general patterns in the settlement history of the landscape regions of the Eastern Netherlands resemble or differ from those of the sandy soil regions of the Southern and Northern Netherlands during late prehistory. For the Southern Netherlands we describe a model in which the cultural landscape is shaped by the location of urnfields, celtic fields and shifting farmsteads. The layout of the celtic field system (characterised by a large-scale form of agriculture) and the system of shifting farmsteads put pressure on the available land. The claim made by local groups to this space is reflected in the emergence of urnfields that are seen as both a territorial marker and a reference point for the local community itself. The settlement landscape changed from the Middle Iron Age onwards. Urfnfields were abandoned, settlement became more stable and celtic fields fell into disuse. In the lime-poor
sandy soils of both the Southern and Northern Netherlands, settlement territories were abandoned. This model is only partially confirmed by an analysis of the data available for the Eastern Netherlands. Although urnfields are known from the study region, their distribution is uneven and almost no traces have been found of celtic fields. However, the Eastern Netherlands does show a similar settlement pattern of shifting farmsteads. It is conspicuous that the coversand landscapes of the Eastern Netherlands in particular show a long continuity of habitation. The presumed settlement shift from lime-poor to lime-rich sandy soils is difficult to demonstrate. It is therefore quite possible that urnfields and celtic fields largely lie beneath the present-day essen, where they cannot be traced. Moreover, the greater part of the coversand landscape is fragmented and small-scale, offering no place for an extensive celtic field system. There was an extensive form of agriculture, however. We may conclude from this that the settlement history corresponds by and large to that of the other sandy landscapes but that the layout of the settlement landscape may have differed.

In a small-scale, fragmented landscape, research should focus primarily on designating ensembles of coversand ridges, which together could form a settlement landscape (Siedlungskammer). Parts of the settlement landscape of Salland have earlier been described in this way in an expansion and contraction model. In addition, research findings from Raalte appear to show that small coversand ridges can also jointly constitute a settlement landscape.

The data presented here shows that, within the study region too, the layout of the settlement landscape underwent major changes from the Middle Iron Age. The studies at Raalte-Jonge Raan and Zwinderen-Kleine Esch relate to small coversand ridges where different generations of an Einzelhof moved over short distances around a central field. The study at Hoolingerveld indicates that in the case of large celtic fields, settlement shifted outside the field complex from the Middle Iron Age, with the slopes remaining in use as fields. In all cases we see a peripheral location of Einzelhöfe vis-à-vis the preceding period. At Borne-Bornschematen, the previously uninhabitable landscape was even cultivated as drier conditions made it exploitable for a time. The studies at Holtsloot and Borne provide evidence for the location of small cemeteries on or near farmstead perimeters. What stands out is their very modest monumentality, which explains their lack of visibility in the current archaeological database. We note that many farmsteads, and in particular the animal quarters, increased in size during this period. This relates to a greater emphasis on manuring the fields. The material culture of the period is primarily pottery that was inspired partly by the typologies developed for the Northeastern Netherlands and partly (in the southern part of the study region) ties in with that of the Central and Southern Netherlands. The link with these latter regions is not always recognised. As well as the pottery styles, we see a relationship in the tradition of two-aisled houses. In that respect the Eastern Netherlands was part of a transition zone between two material cultures: the Jastorf culture in the north (the mouth of the Elbe) and the La Tène culture in the south.

Although settlement history essentially developed along similar lines here, we also observe differences vis-à-vis the coversand landscape of Southern and Northern Netherlands. There appears to be greater variation in urnfields in the Eastern Netherlands. In addition, it is much harder to establish discontinuity of choice of location (from lime-poor to lime-rich soils) because already in the preceding period we do not see urnfields and settlements appearing at the same time on the same coversand ridge due to the small-scale nature of the landscape.

The layout of the landscape changed once again in the Middle Roman period (2nd century AD) (chapter 4). Various researchers have pointed to the emergence of large settlements such as Wijster as a result of growing contacts (and hence influence) between Germanic groups and the Roman empire. These contacts are said to have led to the creation of large tribal polities (known as Großstämme) and increasing social hierarchy. This romano-centric view has already come under criticism. However, there was no comprehensive model concerning the changing layout of the landscape. A study of the available settlement data shows that Einzelhöfe moved away from the slopes from the beginning of the 2nd century AD and became established in the central parts of the coversand ridges, a process that was accompanied by increasing stability of location. It also seems that Einzelhöfe ceased being the norm, becoming instead a minority as from the 2nd century. Individual farmsteads clustered together to form larger settlements. Whereas the internal structure of these settlements still centred around the farmstead itself during the 2nd century and part of the 3rd century (a settlement comprised a number of individual farmsteads), after that there was an increasing degree of integration as communal enclosures, artisanal zones and cemeteries were created. The beginning of the 3rd century saw a rapid growth in the number of households in various settlements. This almost doubling in size vis-à-vis the preceding period persisted until the latter half of the 4th century, after which both the size and number of settlements fell sharply.

The developments that led to changes in the ordering of the cultural landscape in the Eastern Netherlands coincided with changes in relations between Germanic groups and the Roman empire. There were regulated contacts between the Northern and Southern Netherlands from the 2nd century AD onwards, but changes in material culture (the spread of northern farmhouse types and Rhine-Weser-Germanic pottery) point above all to growing regionalisation. Although this trend continued in the 3rd century, the influx of find material from the Roman empire added a new dimension. In the Central and Southern Netherlands we see an increasing quantity of material from above the limes, much of it connected with migrations of small Germanic groups. All of this must be seen against a background of changes within the Batavian civitas and the growing significance of recruiting young Germanic men for the Roman army. A frontier zone emerged at the beginning of the 3rd century, encompassing – in addition to the Central Netherlands – large parts of the Eastern Netherlands. For Germanic groups this meant increased mobility and for settlements in the Eastern Neth-
erlands it meant access to exchange networks that included the frontier zone. The ebbing of Roman authority in the northern provinces from the latter half of the 4th century onward led to the disintegration of this zone as large settlements lost their raison d’être. Both settlement remains and cemetery studies tell us that continuity of settlement from the 4th to the 6th centuries was much more frequent than is often thought. The absence of a hiatus in the development of material culture (house floorplans and pottery styles) supports the view that the Roman era by no means ended in mass migrations from the Eastern Netherlands. Although this area was given the label ‘Saxon’ from the Early Middle Ages, it should perhaps be pointed out – certainly for the 5th to the early 7th century – that this simply meant that the area displayed little kinship with the regions inhabited by the Frisians and Franks. Pottery complexes from the 6th and early 7th century (e.g. in Deventer, Zelhem and Zutphen) show that exchange with the Central and Southern Netherlands still took place regularly during this period. The proportion of Rhineland imports is relatively high. This changed during the 7th century, when Hessen-Schortens pottery began to predominate. A study of the composition of pottery complexes and grave inventories leads us to conclude that regionalisation arose within the Eastern Netherlands and the neighbouring Münsterland towards the end of the 7th century. Large settlements were not a feature of the Eastern Netherlands. Settlements were also less stable than in Roman times. A study of settlements in Zelhem presents a picture of farmsteads inhabited on average for three to four generations before being shifted. The latter half of the 8th century saw the beginning of a transformation process that lies behind the ordering of the present-day Eastern Netherlands cultural landscape. This process, which did not take place everywhere at the same time, is characterised by the disappearance of settlements, the emergence of fixed farmsteads in the landscape, and the introduction of globular pottery and the boat-shaped house type. These changes were triggered by the incorporation of the Eastern Netherlands into the Frankish empire following Charlemagne’s Saxon wars. The result was the institutionalisation of the landscape through the founding of churches and the introduction of the manorial system. This meant in turn a fixation process (the forerunners of the oldest villages in the Eastern Netherlands date from this period) that now lends itself well to study by means of historico-geographical research. The subsequent period is characterised by esen and by individual enclosures. Over the next few centuries the settlement landscape became denser. Many of the farmsteads moved closer to the edges of the esen in the 12th century. Tax registers plus historical maps allow excellent opportunities to chart this medieval landscape in detail. Chapter 6 explores the study of the long-term history of cultural relations. Quite deliberately, no link is made between ethnic groups and material culture. However, we do argue that a detailed study of distribution patterns in material culture is a good way to identify cultural networks. Material culture encompasses not only inorganic objects but also the way in which building traditions are reflected in house floorplans. An inventory of floorplans from the Eastern Netherlands sheds considerable light on the network of relationships within which settlements operated. For example, large parts of the Eastern Netherlands were characterised during the Late Iron Age/Early Roman period by the presence of two-aisled farmhouses, a tradition that points to contacts with the Central and Southern Netherlands. The Middle/Late Roman era shows a predominance of floorplans from the (northern) Wijster typology, although we also encounter floorplans with links to the building traditions of neighbouring Germany (the Noordbarge type). It is intriguing to discover that this did not simply involve the adoption of new ideas but also led to the development of regional types, such as the floorplans of the Achterhoek and the Central Netherlands coversand landscape. The Early Middle Ages were also characterised by relations with the north and east and the emergence of a regional type of farmhouse (the Zelhem type). This Frankish influence on the landscape was again characterised by the introduction of the boat-shaped type of farmhouse that originated in the Central Netherlands river region. The study of archaeological objects supplements these observations. For example, various pottery complexes from the Achterhoek/Southern Twente show an affinity with the style development of pottery from the river region/Southern Netherlands. The distribution of glass bracelets (La Tène) also fits this picture. The arrival of the Romans from about the beginning of the first millennium until the 1st century AD brought changes in these networks. ‘Frisian’ pottery has been unearthed at many of the find sites: it is possibly the Dutch variant of the Elbe Germanic horizon found in Germany. Rhine-Weser Germanic pottery was introduced during the 1st century, with a regional style variant developing in the Eastern Netherlands. There appear to have been minimal cultural relations with the Roman province of Germania Inferior during the 1st and 2nd centuries AD. This picture changed rapidly from the 3rd century onwards. With the emergence of a frontier zone, large parts of the Eastern Netherlands began to take part in exchange networks which also included the Roman areas. This does not mean, however, that all the products from the Roman empire began circulating in large numbers in the Eastern Netherlands. Although the proportion of wheel-turned pottery did increase, this mainly comprised regionally produced terra nigra-like pottery (for which the production technique did originate in the Roman Empire). Metal, however, did begin to circulate in larger quantities and artisanal activity rose sharply. An almost reverse trend appears to be the growing influence of pottery styles from the Northern Netherlands. In terms of tradition, material culture during the Early Middle Ages is linked to that of the Late Roman period. In addition to the frequent presence of Hessen-Schortens pottery, several find complexes (products from the Rhineland) demonstrate that exchange occurred with the Central Netherlands river region into the 6th century. A more regionally oriented style group developed during
the 7th century. The beginning of the 9th century saw major changes occurring as a result of globular pots being introduced. Artisanal production seems to have played a much smaller role during the Early Middle Ages than in the preceding period.

Chapter 7 opens with an exploration of the central Salland microregion. Using a bottom-up approach, several research methodologies (aimed at a paleogeographical and paleo-ecological reconstruction of the microregion) are presented and evaluated. Paleogeographical changes that can significantly alter the appearance of Pleistocene sandy landscapes are an important and frequently underestimated factor within landscape-archaeological studies of these landscapes. Changes in groundwater levels, for example, have enormous consequences for settlement possibilities. This study looks at a combined methodology that uses existing mapping material (including historical maps), airborne laser altimetry (AHN) and studies of field names in order to arrive at a paleogeographical reconstruction. The combined data have added many details to the existing picture. Thus the geological map of Salland from 1930 has made it possible to reconstruct the location of iron ore depressions, field names offer many clues for reconstructing historical vegetation or the state of the landscape (such as the location of peat areas), and an analysis of the AHN adds yet more detail to existing map images. Well depths are then used to venture statements about paleohydrological developments in the microregion. The results of this study are not clear-cut, partly because of the small size of the dataset. Furthermore, it is not always clear if the depth measurements are the result of fluctuations in the water table or whether other factors are at work. Nevertheless, the study does offer insights into changes in historical groundwater levels. Central Salland appears to have been drier during the Iron Age, while the Late Roman era was a relatively wet period. The results of the palynological study of well contents support this trend. For the microregion of central Salland, we have been able to establish that the landscape became increasingly open. A comparison of pollen profiles from the Late Neolithic, the Middle Iron Age, the Roman era and the Early Middle Ages shows in particular the major changes up until Roman times. If we establish a connection between deforestation and the rise in the water table, we need to bear in mind that the landscape must have been drier during the Neolithic and the Bronze Age. The presumed forest regeneration in the Early Middle Ages was not particularly substantial. The second part of chapter 7 examines the layout and development of fields and parceling systems from the Iron Age to the High Middle Ages. An inventory highlights the gaps in our knowledge, which are caused in part by the manner in which excavations are carried out and in part by the poor conservation of this type of archaeological remains in the Pleistocene substrate. For this reason, much of the evidence comes from indirect sources. A distinction is made here between extensive and intensive forms of agriculture. It is assumed that the long-term, intensive use of arable land in the Pleistocene sandy landscape was not possible without manuring. Moreover, this form of agriculture presupposes stable settlement. Apart from the evidence from archaeology, we also examine the extent to which analysing field weeds from dated archeobotanical complexes can assist the study of manuring. While the outcomes are not clear-cut, in combination with targeted palynological research, they do offer clues for further research. We then discuss how the results of this study can be translated into models relating to settlement and land use. We ask to what extent existing models (developed for studies on the sandy soils of the Southern and Northern Netherlands) can be used to analyse the long-term history of the Eastern Netherlands cultural landscape. We conclude that the continuity hypothesis, which H.T. Waterbolk formulated at the time, cannot be confirmed by means of the results of archaeological research in the Eastern Netherlands. Instead, there appear to be several breaks in the long-term history. Moreover, the shift in settlement from the lime-poor to the lime-rich sandy soils which has been identified in the Southern Netherlands (a process that can be placed in the Middle Iron Age) cannot simply be confirmed for the Eastern Netherlands. Instead, the same settlement locations appear to have been in continuous use, although the location of many individual farmsteads may have changed slightly (i.e. moved to the edges of the coversand ridges). It is important to make different interpretations for large-scale and small-scale (and often fragmented) sandy landscapes. Although the theoretical considerations underpinning different models from the Southern Netherlands are useful concepts for analysing both landscape types, the way this is translated into the ordering of the cultural landscape is different. The chief value of the models from the MDS area appears to lie in analysing large-scale landscapes. For small-scale landscapes, the expansion and contraction model offers a useful starting point because it is based on an analysis of archaeological remains from a landscape ensemble. An alternative to this model could be that continuity of settlement and land use could also occur in a settlement landscape consisting solely of several smaller sand ridges. Finally, the conclusions drawn in previous chapters are brought together in chapter 8 in a number of themes that paint a picture of the long-term development of the Eastern Netherlands coversand landscape. This development is in some respects unique thanks to the influence of the physical-geographical landscape (its fragmentary nature) and historical factors (such as the proximity of the Roman empire and later incorporation by the Franks during the Early Middle Ages). On the other hand, it also displays many similarities with developments in the sandy landscapes of the Southern and Northern Netherlands, which thus far have been described in much greater detail.