

University of Groningen
Groningen Institute of Archaeology – GIA

Annual Report 2009



Cover illustration: A globular vessel found in Frisian Achlum held by R.J. Kusters (GIA), with the analysed *terp* profile in the background (photo K. Blok, RUG/GIA).

CONTENTS

Foreword	4
1. Groningen Institute of Archaeology	5
1.1 Institutional Embedding	
1.2 Profile	
1.3 Staff	
1.4 Finances	
2. Research Results	9
2.1 General Themes	
2.2 Northwest Europe: Stone Age	
2.3 Northwest Europe: Bronze Age-Middle Ages	
2.4 Mediterranean Archaeology	
2.5 Arctic Archaeology	
3. Research Activities	26
3.1 Fieldwork	
3.2 Lectures and Poster presentations	
3.3 Working visits	
3.4 Workshops and Exhibitions	
3.5 Visiting scholars	
3.6 Editorships and Representation on Boards and Committees	
4. PhD Projects	52
4.1 Current Funded Projects	
4.2 Current Self Funded Projects	
4.3 Current Other Funded Projects	
4.4 PhD Projects 2003-2009	
4.5 PhD Defences	
5. Emeriti and Other Retired Researchers	58
6. Publicity	60
6.1 Documentation	
6.2 Press	
7. Publications	62
7.1 Scientific Papers	
7.2 Professional Papers	

FOREWORD

Looking back always puts our day-to-day activities into perspective. Reflecting on 2009, I realize that it was once again a year of change for the Groningen Institute of Archaeology. Jan Lanting retired, Hans Peeters was appointed lecturer, and Henny Groenendijk started work as a professor with special appointment in the field of *Archaeology and Society*.

While the Mediterranean archaeologists continued work on and made good progress with existing GIA projects in Greece and Italy, a new project deserves mentioning that is aimed at studying and publishing, in collaboration with the Archaeological Service of Lazio, a corpus of votive gifts provenient from a unique ritual find complex in central Italy.

The Arctic Centre was a focus of attention during the International Polar Year, which ended in 2009. The Centre hosted numerous activities, including a presentation to the Dutch and Swedish royal families.

Six new PhD students started their research in 2009, while three PhD students defended their work. The new doctors are Peter Abbink (*Antarctic policymaking & science in the Netherlands, Belgium and Germany (1957-1990)*), Luca Alessandri (*Il Lazio centro-meridionale nelle età del Bronzo e del Ferro*) and Steven Hijmans (*Sol. The sun in the art and religions of Rome*). We are expecting 2010 to yield a similar number of PhD defences.

For more information on GIA research, I would like to refer you to this annual report.

Daan Raemaekers
Director

1. GRONINGEN INSTITUTE OF ARCHAEOLOGY

The Groningen Institute of Archaeology (GIA) was established on 23 November 1995. Before 1995, archaeological research within the Faculty of Arts had been organized into four separate departments: the Biologisch-Archaeologisch Instituut, the Department of Classical Archaeology, the Department of Languages and Cultures of the Near East, and the Arctic Centre.

1.1. INSTITUTIONAL EMBEDDING

The Groningen Institute of Archaeology is a research institute within the Faculty of Arts of the University of Groningen, and is responsible for all archaeological research within the University. Nationally, GIA is associated with ARCHON, the Dutch research institute, which comprises archaeology departments at five universities (University of Amsterdam, Vrije Universiteit Amsterdam, University of Groningen, University of Leiden, Radboud University Nijmegen), and RACM (= Dutch National Service for Archaeology, Cultural Landscape and Built Heritage) at Amersfoort.

Within the University of Groningen, GIA is associated with the Centre for Isotope Research (CIR), the Department of Molecular Biology of Plants (MBP), the Centre for Ecological and Environmental and Evolutionary Studies (CEES), the Department of Cultural Geography, and other research groups in the Department of Biology and the Faculty of Spatial Sciences.

1.2. PROFILE

GIA engages in fundamental archaeological research with a strong ecological component in the Northwest European, Mediterranean and the Polar Regions. Operating within the Faculty of Arts, it undertakes all the ecological-archaeological and cultural-archaeological research that is carried out by the University of Groningen. GIA stimulates and integrates fundamental research on past human societies and their environments, from the level of Palaeolithic hunter-gatherers to that of complex urban societies. The Institute facilitates research and archaeological fieldwork through its laboratories, drawing facilities, documentation, GIS, and technical support. In addition, GIA co-ordinates the PhD student training programme and stimulates the dissemination of knowledge and culture to society at large.

1.3. STAFF

Director

Prof. D.C.M. Raemaekers

Advisory Board

Prof. P.A.J. Attema

Dr M.C. Galestin

F. Kruse M.Sc.

Dr P.M. van Leusen

Dr W. Prummel

Management Team

Prof. P.A.J. Attema

Prof. R.T.J. Cappers

Prof. L. Hacquebord

Prof. D.C.M. Raemaekers

Members

Dr S. Arnoldussen

Prof. P.A.J. Attema

Dr J.M. Bos

Prof. R.T.J. Cappers

Dr M.C. Galestin

Prof. H.A. Groenendijk

Prof. A.L. van Gijn

Prof. L. Hacquebord

Prof. A.F.L. van Holk

Dr P.M. van Leusen

Dr A.J. Nijboer

Dr J.H.M. Peeters

Dr W. Prummel

Prof. D.C.M. Raemaekers

Dr D. Stapert

Dr F. Steenhuisen

Dr S. Voutsaki

Post-doc

Dr D. Avango

Dr M.J.J.E. Loonen

Dr J.A.W. Nicolay

PhD Students

Y.I. Aalders MA

Drs B.P. Abbink

Drs L. Alessandri

S.M. Beckerman MA

Drs H. Feiken

Drs U.I. Gustafsson

Drs H.R. de Haas

Drs T.C.A. de Haas

Q. Hao MA

G.M. Klein Goldewijk MA

Drs M.E. van Kruining

F. Kruse M.Sc.

S.G. Matthews MA

Drs A. Nieuwhof

G.R. Nobles M.Sc.

M.L. Ratliff MA

R.M. Roura M.Phil.

M. Schepers MA

Drs T.K. Terpstra

J.G.M. Thilderqvist MA

Drs S.L. Willemsen

Drs I. Woltinge

Support Staff

S.E. Boersma S. Tiebackx

E. Bolhuis L. Tol

Drs J.B. Boschman Ing. H. Woldring

O. Dolnik

M.M. Hazenhoek

T.P. Jacobs

R.J. Kusters

M.A. Los-Weijns

N.D. Maring-Van der Pers BA

Drs G.J.M. van Oortmerssen

R.M. Palfenier-Vegter

K. van der Ploeg

Dr J. Prop

Drs C. Sandström

Dr A.J.M. Scheepstra

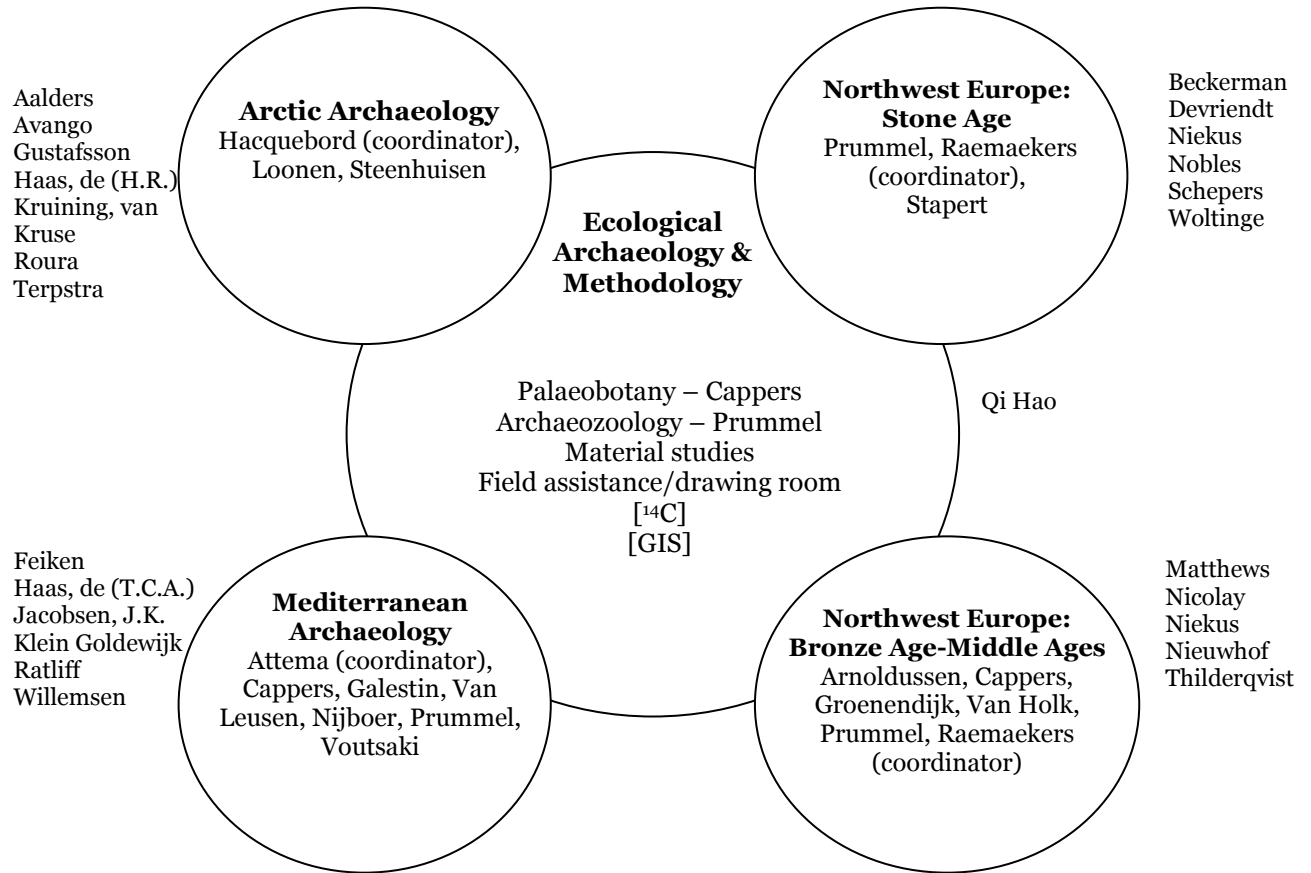
1.4. FINANCES**Revenue direct funding 2009**

Projects	Staff	Exploit.
BWG-Congres		5.500
Hanzelijn	13.900	
RPC-boek		4.200
Depot Halos		5.200
Digitale Zaden Atlas	13.000	24.000
	<u>26.900</u>	<u>38.900</u>

Revenue indirect funding 2009

Projects	
Valuable Flints	25.500
Hidden Landscapes	64.900
NAP 400 Years	9.900
NAP Health Issues	1.600
Green Harbor	69.000
Nespico	48.500
Birdhealth Startsubsidie	4.000
Birdhealth	16.000
Health Breeding Birds	35.000
Lashipa 2	7.200
Kings of the North Sea	38.000
Levensstandaard Romeinse Rijk	36.000
Early 20 th Century Whaling Industry	53.600
WB Pool Instituut	22.100
Odyssee N. Westergo	40.000
Steilkantenproject Friesland	11.400
AMAP	151.300
	<u>634.000</u>

GRONINGEN INSTITUTE OF ARCHAEOLOGY: SOCIETY AND ENVIRONMENT



Inside diagram: members; outside diagram: PhD students and post-docs
 Between square brackets: associated lab or lab in development

2. RESEARCH RESULTS

2004-2009 Research Programme: Society and Environment

The GIA research programme for 2004-2009 looked at the relationship between former societies and their environments. The two focal points of research were on the one hand, understanding how the development of societies has been influenced by environmental factors such as climate, topography and natural resources and how societies and the gradual development of a cultural landscape in which man-made elements predominate have changed the environment. For additional information about the 2004-2009 programme, readers are referred to GIA's website: www.rug.nl/let/gia.

2.1. GENERAL THEMES

2.1.1. Archaeological Heritage Management

Website of the GIA archaeozoological reference collection (J.T. van Gent, R.J. Kusters, T.P. Jacobs & W. Prummel)

The database of the GIA archaeozoological reference collection of modern skeletons for the identification of archaeozoological material has been augmented with the mollusc shells present in the reference collection. The Donald Smits Center for Information Technology (CIT) of the University of Groningen is building a website that will give scholars and the general public access to the database. The website, which will include photographs of skeletal parts, will be launched in 2010.

Prospection of Old Tidal Deposits (I. Woltinge)

Research is being conducted into the prospection of old tidal deposits in southern Flevoland. The region's river system, the Oude Eem, is similar to the IJssel-Vecht system in the Swifterbant region, leading to the hypothesis that this area may have been used as widely in prehistory as the Swifterbant area. So far, only a few indications of the prehistoric use of this stream valley are known, but they have a high quality of conservation (the site at Almere Hoge Vaart-A27 being the most important). The aim of this research is to gain a better understanding of how these deposits should be prospected in order to improve the chance of finding any archaeological remains in the buried landscape of southern Flevoland.

Participation project Klooster Yesse/Essen (H.A. Groenendijk)

This is a new project that will draw on the assistance of the inhabitants of the village of Essen in order to prepare a description of the archaeological relics present in the subsoil. Essen, in the municipality of Haren (province of Groningen), is the location of the mediaeval convent of Yesse, whose remains are fairly unknown and enjoy little protection. A preservation and visualization programme is being drafted with the help of local inhabitants. Students will be involved in communicating and presenting the results to the parties involved (local inhabitants, local government officials, media).

2.1.2. Isotopes in Archaeology: Diet and Chronology

Absolute chronology in the Mediterranean during the Iron Age (A.J. Nijboer)

Several articles were published in 2009 based on radiocarbon determinations carried out in recent years. The samples for the ¹⁴C analyses were carefully selected in order to obtain as much evidence as possible regarding their archaeological and historical significance. A sequence in time of tombs in Latium Vetus and Tarquinia (Italy) were sampled and assessed, as well as radiocarbon determinations from the earliest layers at Carthage and Huelva (SW Spain) from a context with Phoenician ceramics that are assigned in the Levant to the Iron IIa period. The research into the absolute chronology of the Iron Age in the Mediterranean resulted in several published articles that discuss archaeological evidence for cultural interconnections among various communities in the Mediterranean.

2.1.3. Vegetation, Fauna and Human Impact

Digital Plant Atlas (R.T.J. Cappers, R. Neef & R.M. Bekker)

The second part of the Digital Plant Atlas was produced in 2009. It entailed taking 10,000 high-quality, full-colour photographs, representing 3,767 plant species from 272 plant families. The atlas contains 15 separate indices: scientific plant name, pharmaceutical plant name, and plant names in English, German, French, Dutch, Spanish, Arabic and Arabic transcription, Turkish, Chinese, Pinyin, Hindi, Sanskrit and Malayalam. A start has already been made on the production of the next atlas, the Digital Atlas of Economic Plants in Archaeology.

Ancient mitochondrial DNA analysis of aurochs and cattle bones from the coastal area and the sandy soils of the Northern Netherlands (R. Fens, K. Vrieling (University of Leiden) & W. Prummel)

A trial was conducted at the Biology Institute Leiden, Faculty of Science, University of Leiden to isolate, amplify and sequence parts of the mitochondrial DNA of samples of bones identified as aurochs (*Bos primigenius*) and cattle (*Bos taurus*) from river valleys in the Drenthe Plateau and *terp* sites in the provinces of Groningen and Friesland. The research questions for this project are: 1) which soil types give good preservation of ancient DNA and which do not? 2) are the aurochs in the north of the Netherlands a single population or are distinct groups discernible? 3) are Roman and early medieval cattle in the *terpen* area a single population or do they have different origins? The last question is of interest to explain the hiatus in the human population of the area. Most of the cattle bones studied were shown to still contain ancient mitochondrial DNA that could be amplified and sequenced. The mitochondrial DNA of the samples studied proved to be very homogeneous. No introgression with female aurochs was present in these cattle samples. Only two aurochs bone samples contained enough mitochondrial DNA to be amplified and sequenced. The ancient DNA of the other aurochs samples has probably been affected by decades of detrimental storage conditions or harmful preservation methods, as most of the unsuccessful bone samples were found in the late 19th to early 20th centuries. The two aurochs bone samples that did contain amplifiable authentic DNA came from a *terp* site (early medieval period) and from the Tjonger valley in the Drenthe Plateau (late neolithic). Their patterns are clearly of aurochs, and slightly different.

Ritual bones or common waste – A study of bone deposits in Northwest Europe (J.G.M. Thilderqvist)

The first half of the year was spent completing the last two material chapters of the thesis, which deal with the bone materials from Midlaren (the Netherlands) and Uppåkra (Sweden). A start was then made on the interpretative chapter, which will examine the special deposits from the four bone materials analysed using various historical and ethnographical analogies, within the constraints of the archaeological and archaeozoological materials.

The establishment, decline and fossilization of the Late Boreal Scots pine forest near Roderwolde (H. Woldring & J. Zomer)

A study was made of the establishment, decline and fossilization of the late Boreal pine forest in the Stobbenven, a depression on the edge of the Drenthe Plateau near Roderwolde (municipality of Noordenveld, province of Drenthe). Standing groundwater on the impermeable till initiated the peat growth in the depression at c. 9300 BP. In response to declining water levels resulting from climatic drought, pine forest spread on the peat layer around 8500 BP. A rapid rise in water and ground water levels at the Boreal-Atlantic transition led to the drowning and fossilization of the last generation of pines, ¹⁴C-dated at c. 7900 BP. On the Pleistocene sandy soils in the Matsloot-Roderwolde polder, only one km north of the Stobbenven, peat growth started in c. 5000 BP. From this time up to the beginning of the Christian era, the prevailing vegetation was marsh and freshwater vegetation dominated by reed and saw sedge. Whereas the marine influence was completely absent in the Stobbenven, the sedimentation of marine organisms demonstrates the occasional inundation of the peat deposits by sea water during this time. From around 2200 BP the increasing proportions of silt and salt-tolerant vegetation reveal the further extension of marine influence. From the early medieval period, salt marsh plants expanded locally on the clastic deposits. The sedimentation of marine silts ended in c. 1000 BP, possibly because dike building began in the northern coastal area at this time.

Taxus in past and present: a multifaceted conifer (H. Woldring, P. Cleveringa & D. van Smeerdijk)

During the Early Holocene, taxus was limited to the south-west Mediterranean (Corsica, France). A review of palynological literature shows that taxus expanded to western and central Europe around the mid-Atlantic (c. 6500 BP). In addition to more oceanic conditions, local man-induced disturbance also seems to have favoured this expansion. In central Europe climatic and/or natural vegetation changes largely generated the slight increase in pollen frequencies from the late Atlantic and the gradual decline since the Subboreal. Several sites in the coastal zone of the southern North Sea Basin show a significant expansion of taxus in response to major forest clearance in the (Early) Subboreal. At sea level sites, hydrological changes relative to improved drainage and regular inundation as a consequence of upland deforestation provided favourable conditions for the establishment of taxus. Waterlogged conditions put an end to this primarily natural expansion. At sites above sea level in the coastal area, taxus values rapidly declined in response to intensified farming, in which cattle raising played a substantial part.

2.1.4. Material studies and conservation

Conservation and restoration of archaeological artefacts (A.J. Nijboer & G.J.M. van Oortmerssen)

In 2009, a large quantity of delicate material from the excavations at Crustumarium (Rome, Italy) was restored and assessed in the Laboratory for Conservation and Material Studies (www.lcm.rug.nl). Detailed reports on the restoration of some artefacts are being prepared and material is being collected for an article on specialized metalworking techniques at Crustumarium during the 8th-7th centuries BC.

2.2. NORTH-WEST EUROPE: STONE AGE

2.2.1. Stone Age Society: Pattern and Process

***Middle Palaeolithic finds in the Northern Netherlands* (M.J.L.Th. Niekus, J. Beuker, L. Johansen & D. Stapert)**

Efforts to locate and investigate Middle Palaeolithic sites in Drenthe, Friesland and Overijssel have been very successful. In particular, a site near Assen has produced a large number of finds, including several handaxes. This work was done with the help of amateur archaeologists and students. Geological research was also carried out, in cooperation with several institutions.

***Middle Palaeolithic in the Netherlands* (D. Stapert, M.J.J.L.Th. Niekus & L. Johansen)**

Middle Palaeolithic finds from several sites in the Netherlands were studied. Special attention was paid to an interesting group of artefacts with a black patina, mostly deriving from river deposits.

***Flint artefacts worked by Palaeolithic children* (L. Johansen & D. Stapert)**

This project involved the study of several collections of Middle Palaeolithic artefacts (including the Offerman collection) in order to isolate and describe artefacts that were possibly worked by those learning the craft of flintknapping, namely children. Quite a few examples were found, and these were drawn and studied for publication.

***Mauern project* (A. Carmiggelt, I. Woltinge, L. Johansen & D. Stapert)**

Finds from the Late Middle Palaeolithic site of Mauern, excavated by A. Bohmers in 1937-1939, were studied in Groningen, Munich and Neuburg. The Groningen collection from Mauern was returned to the Staatssammlung in Munich. A dating project involving six bone retouchers was started, in cooperation with the Staatssammlung and the Groningen Centre for Isotopic Research CIO.

***Late Palaeolithic sites* (G.R. Boekschoten, L. Johansen & D. Stapert)**

Together with L. Johansen, finds from several Late Palaeolithic sites were studied (including Ureterp). In collaboration with Boekschoten, spatial patterns at several Upper Palaeolithic sites (including Pincevent, Etiolles) were studied with the help of the ANALITHIC computer program.

Mesolithic aurochs bones from the Tjonger river valley (province of Friesland)

(W. Prummel, M.J.J.L.Th. Niekus, S. van der Meulen & R. Fens)

Several dozen animal bones and a flint blade were discovered in 2004 by an amateur archaeologist after digging activities in the valley of the River Tjonger. The bones, which were studied in 2009, proved to be those of a single, small female aurochs dating to the Late Mesolithic (GrA 43184, 6690±40 BP, calibrated c. 5701-5530 BC). Cut and chopmarks and the presence of an unretouched flint blade indicate human involvement in the accumulation of these bones. Measuring just 134 cm at the withers, the female aurochs was remarkably small. A DNA analysis of a bone sample was negative: the sample did not contain enough authentic DNA. The finds are most probably the remains of a single episode of hunting and/or butchering during the Late Mesolithic. Several similar sites are known within the valley of the Tjonger, such as Jardinga, where several aurochs were butchered during the Late Mesolithic. Outside the Netherlands, the Danish sites of Vig and Prejlerup and that of Potsdam-Schlaatz in Germany may serve as examples of such prehistoric 'snapshots'. Archaeologists should pay more attention to infrastructural and other work conducted in river valleys and other waterlogged environments.

Animal remains from the Helpermaar 2008 excavation (municipality of Groningen)

(W. Prummel)

The animal remains from the Helpermaar 2008 excavation were studied in 2009. Of the approximately 80 animal remains, most are calcined and unidentifiable. They probably have a Neolithic date. Pigs, goats and cattle have been identified. The few unburnt bones, mainly of cattle, are probably of recent origin.

2.2.3. Origins and spread of agriculture

The New Swifterbant Project (D.C.M. Raemaekers, M. Schepers, I. Woltinge & I.I.J.A.L.M. Devriendt)

The 2008 coring campaign around river dune S21-S24 clearly showed that a small creek north of the dune provided an excellent entrance to the dune (Raemaekers & Geuverink, 2009; Geuverink *et al.*, 2009). The 2009 fieldwork aimed to provide a well-preserved assemblage from this levee to obtain a clearer picture of the exploitation of the river dune, itself poorly preserved. Although the levee produced no finds, the narrow zone between levee and dune yielded an assemblage dating to c. 3900-3800 BC. Finds from this period are rare at Swifterbant and S25 will be further excavated in 2010 in the belief that it may prove a significant site for understanding the development of TRB in the Netherlands.

Experimenting with Early Neolithic perforated wedges (E. van de Lagemaat, R. Meijer & D.C.M. Raemaekers)

To gain a better understanding of the use of Early Neolithic perforated wedges ('Breitkeile'), Meijer produced three experimental pieces used for a woodworking experiment by Van de Lagemaat. The experiments were based on the macroscopic marks visible on both tip and back of the archaeological tools. It was concluded that the wedges are well-suited for wood working, both as axes for felling trees and as hammers for driving wood wedges into trees to produce planks. The results will be published in *Paleo-aktueel* (2010).

2.3. NORTH-WEST EUROPE: BRONZE AGE – MIDDLE AGES

2.3.1. Occupation History of the Sandy Soils

Bronze Age finds from the Oude Diep (Fluitenberg-Koeweide, Hoogeveen) (province of Drenthe) (W. Prummel, M.J.L.Th. Niekus, W.A.B. van der Sanden (Drents Plateau), S. Arnoldussen & G. Aalbersberg (RAAP))

The pottery sherds and stone objects found in association with bones of a red deer, a cow, an aurochs and a bird (presumably a mallard) in a former gully of the Oude Diep near Hoogeveen (see GIA Annual Report 2008, p. 14) were studied in 2009, as was the geology of the site. The four pottery sherds proved to belong to the same 'barbed-wire' stamp-decorated beaker, a type of pottery dating to c. 2020-1740 BC. The ¹⁴C-dates carried out on bone samples of red deer, cattle and aurochs suggest that these animals date to the Bronze Age as well but are younger than the pottery: red deer (*Cervus elaphus*) 1429-1267 BC, cattle (*Bos taurus*) 1377-1091 BC and aurochs (*Bos primigenius*) 1121-916 BC. These dates suggest that this site in the Oude Diep valley was visited at least three times during the Bronze Age (2020-1740, 1377-1267 and 1121-916 BC) by people who discarded pottery sherds there, hunted for aurochs, red deer and birds, and butchered a cow. Although the sherds of the 'barbed-wire' stamp-decorated beaker may have been deposited in the gully as a ritual act, a profane interpretation – i.e. loss or waste disposal – is more probable. An archaeological survey of the vicinity yielded evidence of human presence in the Oude Diep stream valley during the Mesolithic, the Bronze Age and the Iron Age. Some wooden stakes and wicker structures that were also discovered in the newly-dug stream were found to be of post-medieval date. The results of the investigations once again show that stream valleys have a higher archaeological potential than generally assumed. This potential needs to be addressed in heritage strategies and decision-making processes.

Iron Age habitation patterns (S. Arnoldussen & R. Jansen (University of Leiden))

Based on a preliminary study of Iron Age settlements in the Northern Netherlands and their settlement dynamics, a publication has been prepared on the process of settlement nucleation in the Northern and Southern Netherlands coversand areas (due 2010).

2.3.2. Exploration and Exploitation of the Coastal Area

Publication of the fieldwork at Anjum (J.A.W. Nicolay, W. Prummel & J.T. Van Gent)

The publication of the fieldwork carried out at a *terp* site near Anjum (2006) was completed and will appear in 2010. The publication also includes the results of an earlier excavation at a *terp* site near Birdaard (1998). The archaeozoological studies clearly showed that domestic animals were the most important animals at this site in all periods. Sheep were the most numerous animal species in the 9th-11th centuries, followed by cattle. The high ages of the sheep in the 9th century shows that wool production was the principal function of sheep in that century. A fragment of woollen cloth and tufts of wool have been found in 9th century AD layers of this *terp*. Sheep were killed at younger ages in the 10th-13th centuries, when meat production was obviously more important. Two sheep molars and a cattle mandible from the 9th-10th century AD have very high $\delta^{15}\text{N}$ values (10.13 and 9.56 respectively), probably as a result of the salt marsh conditions in that period. Cattle husbandry was the main type of animal husbandry in the 12th-13th century AD, which followed the enclosing of the salt marshes around the sites by dikes and the development of a fresh-water environment that was much more suitable for cattle husbandry than sheep raising. Hunting, fowling and fishing were of minor importance for the inhabitants. The quantity of bird and fish bones was limited, despite sifting many soil samples with 5 and 2 mm mesh sieves. Mollusc shells were found in large quantities, however. Whereas mussels, cockles and periwinkles were consumed, many mollusc shells were brought to the site as heightening or levelling material or for use in pottery production.

Publication of the fieldwork at Hallum (J.A.W. Nicolay, S.-J. Tuinstra & J. Veldhuis)

An excavation was carried out in 2006 by the commercial company Archaeological Research & Consultancy (ARC bv) at the *terp* site of Hallum. The first author, one of the editors of the final report, wrote the synthesis.

Research agenda about the pre- and protohistory of the coastal area of the Northern Netherlands (J.A.W. Nicolay, J. Bazelmans (RCE), H.A. Groenendijk, G. de Langen (Province of Friesland) & A. Nieuwhof)

The NOAA chapter on the late prehistory and protohistory of the holocene part of the Northern Netherlands was brought up to date with the results of archaeological research in the area in the past five years.

Remains of rituals in the coastal area of the Northern Netherlands (A. Nieuwhof)

Research on the remains of rituals was continued. A catalogue of human remains in the coastal area from the pre-Roman and Roman Iron Age was completed as part of the forthcoming dissertation.

The use of the landscape for animal husbandry, hunting and fishing at the *terp* site of Wijnaldum-Tjitsma (province of Friesland) – a short *Odyssey* project of NWO (W. Prummel, J.T. Zeiler & E. Esser)

NWO, the Dutch scientific research organization, awarded a grant to publish the archaeozoological results from the *terp* site of Wijnaldum-Tjitsma in Northern Westergo (province of Friesland) (Roman and Early Medieval periods). GIA and the University of Amsterdam excavated parts of this *terp* in 1991/93. The excellent preservation conditions and the ample availability of fish and bird remains due to successful sieving make it important to publish the archaeozoological material from this site. A special topic of interest is the possible changes in animal husbandry, hunting and/or fishing, with the rise in status of the *terp* in the Early Middle Ages. The available archaeozoological data were collected in 2009, and additional bone identifications were also made.

2.3.3. Interrelationships, Exchange and Trade

Tiel (R.T.J. Cappers)

Botanical samples from Tiel have been studied and shown to be very rich in plant species. Of special interest are box (*Buxus sempervirens*) and melaguetta pepper (*Aframomum melagueta*).

Colmschate (R.T.J. Cappers & J. Baines)

Samples from Colmschate have been studied and compared with published studies of nearby settlements.

Dutch *Situlae*: Hallstatt or Late Bronze Age? (S.G. Matthews)

This project investigated the possibility that a number of the Dutch *situlae* should be dated to the Late Bronze Age rather than the Iron Age Hallstatt period, as was previously thought. As no detailed studies exist for any of the Dutch *situlae*, the vessels from Ede, Baarloos and Oss – all in the collection of the RMO – were studied in considerable detail, in particular aspects of their construction, use and repair. This enabled us to prepare detailed drawings of the vessels so that comparisons with other European vessels could be undertaken. Extensive XRF analysis was also conducted on all three of the buckets with the kind cooperation of colleagues from the Dutch Cultural Heritage Agency (H. Huisman and B. van Os) in order to help identify aspects of the vessels' construction that could be chronologically defined as belonging to either the Late Bronze Age or Iron Age. The typological comparison with other vessels from the British Isles, central Europe and south-eastern Europe, combined with the preliminary analysis of the XRF results, all suggest that a Late Bronze Age date is extremely likely for the vessels from Ede and Baarloos, and that the vessel from Oss may have been extremely old before being deposited, suggesting a tentative date for its construction at Late Bronze Age-Iron Age transition.

Kings of the North Sea (J.A.W. Nicolay)

This VENI research project on power formation and early medieval kingship during the 5th to 7th centuries AD was continued during 2009. The research will be published as a monograph at the end of 2010.

2.3.4. Maritime Archaeology

Investigation of shipwrecks in Flevoland (A.F.L. van Holk)

In 2004, wooden fragments of a shipwreck came to the surface during agricultural work (deep ploughing) at lot R 4 in the province of Flevoland. A sample of the fragments was dated dendrochronologically to AD 1593. The provenance of the wood is Sweden. The excavation was initially planned as a trial excavation but the shipwreck proved to be in such a deplorable state that a decision was taken to excavate the remains completely. The ship was damaged during several phases. It probably first disintegrated just after it was wrecked. After land reclamation the wreck was damaged in two phases by drainpipes, and finally the deep-ploughing destroyed part of the bottom. The wreck was never reported to the authorities. What was left was part of the bottom and aft, at the port side, a couple of the side strakes. Surprisingly, an intact Bartmann jug was found in the stern of the vessel. A complete inner timber turned up next to the wreck, making it possible to reconstruct a cross section of the vessel. The seams between the strakes were caulked by moss, mosslath and sintels/*prikken*. The estimated dimensions of the bottom are 10.6 m in length and 3.6 m in width, with a probable overall length of 15 m. Although the wreck was found near the former coastline, it may not have been wrecked in open water. In particular, the deposition of a great deal of rubbish possibly from nearby settlements (dating from the 12th to 16th century AD) along the sides of the wreck (in erosion gullies) suggests both an active current and an enclosed area of water rather than open water.

Stock-taking and database of shipwrecks in Flevoland (A.F.L. van Holk)

October saw the start of the NWO-funded Odyssee project ‘Fish and fortune for Holland. The ‘waterschip’, floating fishpond and tugboat and the prosperity of Holland in the sixteenth and seventeenth century’. Forty wrecks of ‘waterschepen’ have been found in the province of Flevoland, of which twenty have been excavated and only two published. These fishing vessels date from between 1500 and 1700 and played an important role in feeding the fast-growing population of the urban centres in Holland. The ships form an interesting group of vessels because they were in use over a long period, serving different functions (fish transport, fishing vessel and tugboat). According to historical sources they span an even longer time-frame: from the 14th to the 19th century. The type name ‘waterschip’ suggests a coherent group of ships, but the archaeological evidence shows wide variation within the type. The long timespan during which these ships were in use allows for a diachronic study of technological changes in shipbuilding. This is reflected in these vessels in the important period between 1500 and 1700, when major changes occurred in shipbuilding technology. This includes the transition from clinker to carvel-built hulls, as well as other innovations due to modernization. The first version of the database is complete, and the first report on the excavation of a ‘waterschip’ at lot NE 160 is underway.

Dutch clinker-built ships in the 15th and 16th centuries (A.B.M. Overmeer)

This PhD deals with about seven late medieval clinker-built ships found in the Netherlands. They show characteristics found in the three medieval shipbuilding traditions of Scandinavia, the Baltic and the Dutch IJsselmeer polders, but none can be classified under a single tradition. The research attempts to allocate the Dutch clinker-built ships, with their different features, to the medieval shipbuilding traditions of Europe in order to shed light on developments in interregional trade and shipbuilding in this period. Much of 2009 was spent researching all finds of clinker-built shipwrecks in the Netherlands, in order to compare them with the major find of the ship at lot U 34. The excavation report of shipwreck B 36 in the Noordoost polder, partly excavated in 2007, is complete (Overmeer, 2009). Attention is also being paid to the political and economic changes in the Zuiderzee region in the 15th and 16th centuries. This will culminate in a dissertation in 2010.

2.4. MEDITERRANEAN ARCHAEOLOGY

2.4.1. Centralization of Settlement, Urbanization and Colonization Processes, Land Use

ITALY

Crustumarium Project (central Italy) (P.A.J. Attema, A.J. Nijboer & S.L. Willemsen in collaboration with the Soprintendenza Speciale per i Beni Archeologici di Roma (F. di Gennaro, B. Beelli Marchesini & W. Pantano)

Fifteen tombs, all clustered in one area of the necropolis, were investigated in the summer of 2009. It appears that this part of the cemetery was used more intensively than others; several tombs intersected with one another and some contained more than one deposition. The tombs appear to be of a relatively late date, between 650 and 550 BC. The funerary assemblages are modest in quality and quantity. The situation encountered here is radically different from other parts of the necropolis, where tombs were more widely spaced and sometimes quite rich in contents. Most of these tombs date a little earlier, between the end of the 8th and the middle of the 7th century BC. The objects recovered from the tombs during this campaign will be restored, drawn, described and interpreted. A close study of the objects will enable us to investigate the changing funerary rituals in more detail. Furthermore, three tombs left unfinished in 2008 have now been fully excavated and documented. Attema and Nijboer prepared and submitted a 'Vrije Competitie' research application to NWO to extend the project.

PhD Research within the Crustumarium Project

The Iron Age necropolis Monte Del Bufalo at Crustumarium (S.L. Willemsen)

In March and April 2009, the documentation of excavations carried out by the archaeological service in Rome (SSBAR) were studied and partially incorporated in the present research. The summer of 2009 was spent excavating fifteen more tombs and finishing the investigation of three tombs that had been opened in previous years. The excavation data from all the excavation campaigns executed by the GIA are now being studied and processed. A more extensive database was also designed, which will allow us to analyze several aspects of the funerary ritual in more detail.

Pontine Region Project (central Italy) (P.A.J. Attema and research group)

Carta Archeologica del Comune di Nettuno/Astura project (P.A.J. Attema, G.W. Tol & T.C.A. de Haas)

In March 2009, the volume *Nettuno, il territorio dalla preistoria al medioevo, la Carta Archeologica* was officially presented to the public at Nettuno. The extended publication in English was finalized, corrected and submitted to appear as a supplement to the *Bulletin Antieke Beschaving*. It is presently being proof-edited. With the help of Van Loon, Tol inventoried the Nettuno artefact collection during 2009 and compiled a report for the Archaeological Service at Rome. Their work led to the discovery of materials from a number of protohistoric sites in the vicinity of the open-air sanctuary of Campoverde that have yet to be studied. Materials from the latter site present in the Nettuno collection were incorporated in Van Loon's Research Master's thesis. This will lead to the formulation of a new subproject on the site and surroundings of Campoverde. Attema, Tol and De Haas submitted the second and final report on the Astura/Nettuno surveys for publication in *Palaeohistoria*.

Regional developments and supra-regional processes in archaeological landscapes. A landscape archaeological study of the Pontine region (Italy) from the Bronze Age to the Early Middle Ages, based on the Pontine Region Project (1987 – 2006) (P.A.J. Attema, NWO replacement grant)

This project will result in a synthesizing monograph in two volumes detailing the long-term settlement history of the Pontine Region. An arrangement has been made with NWO to submit the preliminary manuscript of volume 1 (9 chapters in total) in February 2010. By the end of 2009, a draft of all but one chapter (on the early medieval period) had been written, while the second volume containing an overview

of all surveys and archaeological sites was almost ready. After submission to NWO in 2010, the editing of the volume will take at least one more year.

PhD research within the Pontine Region Project

Landscape and human settlement in protohistoric southern Lazio (L. Alessandri)

On 29 October, Alessandri successfully defended his dissertation 'Il Lazio centromeridionale nelle età del Bronzo e del Ferro'.

Roman colonization, settlement and land use of three landscapes in the Pontine region (T.C.A. de Haas)

All fieldwork for his PhD being done, work in 2009 concentrated on working up the data. Remaining artefacts were studied, and all databases, catalogues and GIS data were then prepared for analysis. The three chapters on the field surveys in the Nettuno, Pontinia and Norba areas, as well as the methodological chapter, were written and a start was made on an integrated interpretation of the data in the light of Roman colonization. As part of a separate research assignment, a start was also made on an overview report of the Pontine Region Project surveys carried out between 1987 and 2005.

The archaeological map of Nettuno; site classification and analysis of a local settlement system (700 BC – 500 AD) in a regional context (G.W. Tol)

Fieldwork and cataloguing on the case studies were completed in 2009 and the first case study is being prepared for submission in early 2010.

A socio-economic and political landscape archaeology of transition: southern Lazio from the Late Roman period to incastellamento (O.P.N. Satijn)

With the database finally completed, the analytical chapters of this dissertation are slowly coming along. A new schedule was made, which sees the manuscript finalized in 2011.

Architecture in Archaic Lazio (Italy) (E. van 't Lindenhout)

All chapters of this thesis on Archaic building in Lazio were submitted to the supervisor at the end of the year. The reading committee is expected to be formed in spring 2010.

The Hidden Landscapes Project (P.M. van Leusen)

The Hidden Landscapes HL fieldwork programme in Lazio and Calabria was completed (except for the geophysics experiments) in 2009. Two short campaigns were conducted in Calabria to complete material studies for the RAP, and work was begun on a site and finds catalogue covering the years 2000-2008. Separately, Feiken conducted a final field campaign to collect data for the CALEROS erosion model. In Lazio, a final HLP excavation was conducted with Feiken in May at the Bronze Age to Roman site of Tratturo Caniò; specialists are still working on various find groups from this site. The results of the 2005-2008 HLP field surveys in the Lepine mountains are being compiled for publication in the form of a site and finds catalogue. An application for an NWO 'Vrije Competitie' grant to extend the HLP research plan was submitted in August 2009. The GIS environment for the department of KMA was extended to include further historical cartographic layers (1927 DEM, air photos 1936-1956) and topographic maps (top5 Latina, top25 Calabria).

PhD research within the Hidden Landscapes Project

Geo-archaeological approaches to the Hidden Landscapes of Italy (H.R. Feiken)

This PhD research on the geo-archaeology of the Pontine Region and the Sibaritide has entered its final phase, with writing beginning in September 2009. Feiken spent the larger part of 2009 writing up his dissertation (planned end date: 31 March 2010, supervisor P.A.J. Attema, co-supervisor Prof. J. Sevink; at his own request, his appointment was reduced to 0.3 fte as of September).

Regional Pathways to Complexity (completed NWO project) (P.A.J. Attema & P.M. van Leusen)

Attema and Van Leusen finished work in late 2009 on the text of the RPC synthesizing volume *Regional Pathways to Complexity settlement and land use dynamics in early Italy* (with G.J. Burgers of the KNIR). Preparation of the figures and text layout for final publication (by B. Brouwenstijn, VU) is progressing. The book, to be published by the Amsterdam University Press, is scheduled to appear in 2010.

The International Francavilla Archaeological Project (P.A.J. Attema, J. Jacobsen, P.M. van Leusen in collaboration with M. Guggisberg (Archäologisches Seminar, University of Basel), and the Soprintendenza per I Beni Archeologica della Calabria)

The various research activities of the GIA in the Sibaritide in Calabria, South Italy now come under the umbrella of the International Francavilla Archaeological headed by the GIA. These are the excavations at Timpone della Motta (field director Dr J. Jacobsen, GIA), the excavations in the Macchiabate necropolis (field director Dr M. Guggisberg, University of Basel) and the archaeological surveys of the Raganello Archaeological project (field directors P.A.J. Attema and P.M. van Leusen).

In 2009 the GIA conducted archaeological excavations in Francavilla Marittima in the sanctuary on the Timpone della Motta as well as in a nearby supposed Kerameikos area (known as Area Rovitti). Excavations at the Macchiabate necropolis were conducted in collaboration with the Archäologisches Seminar of the University of Basel. They are part of a three-year field programme aimed at investigating new contextual aspects of the 8th and 6th century BC periods in the area of the Timpone della Motta and the Macchiabate.

Area Timpone della Motta

Further excavations were carried out in the area of the sacred structure from the 6th century discovered in 2008 (Sector MS3). The limits of the structure were identified to the north, while excavations to the east and west revealed the continuation of the building. A number of *pinakes* decorated with processions and architectural terracottas were found in contexts immediately on top of the structure. A test excavation to the south clarified that the building had been constructed on a levelling layer, with a thickness of between 40 and 50 centimetres. Several accumulations of votive material containing broken and complete objects as well as animal bones were excavated within the layer. The accumulations are possibly related to foundation rites performed during the erection of the building. In sector SM in the south-western part of the sanctuary, the excavation of a terrace wall datable to the middle of the 7th century BC was completed. Extensive deposits datable to the last decades of the 8th century BC were excavated underneath the wall.

Area Rovitti

This area had been located in previous surface investigations in 2007 on the lower south slopes of the Timpone della Motta. The remains of pottery kilns and 8th century BC pottery found here strongly indicated that a Kerameikos had been active in the area during the Early Iron Age. The first excavation, conducted in 2009, identified remains of a possible dwelling datable to within the first three quarters of the 8th century BC. Only a limited part of the structure was excavated. This contained a large quantity of locally manufactured pottery with clearly recognizable Greek Geometric prototypes as to manufacture, shape and decoration. This Oinotrian-Euboean pottery exhibits a range of Greek shapes, such as skyphoi, oinochoai, craters and amphoras. Indigenous material was almost entirely absent in the structure. Further excavations are planned for 2010.

Area Macchiabate

A Swiss team from the Archäologisches Seminar of the University of Basel headed by Prof. M. Guggisberg conducted investigations in the Macchiabate necropolis in August and September. First of all, a geophysical survey was conducted, which resulted in the discovery of several new grave clusters throughout the necropolis as well as the localization of a number of individual burials in the area of the 'Tomba della Strada'. During the second stage, a female burial datable to the second half of the 8th century BC was excavated. In addition to many bronze objects, the grave contained a wheel-made crater on a high stand, which can probably be ascribed to the group of Oinotrian-Euboean pottery in Francavilla Marittima.

Raganello Archaeological Project

Although some additional fieldwork was done for the survey, most work was aimed at completing the artefact studies and compiling the site catalogue for the final publication of the Raganello Archaeological Project.

PhD research within the International Francavilla Archaeological Project

Raganello Archaeological project:

Settlement dynamics in the hinterland of the Sibaritide (Calabria, Italy) (F. Ippolito)

In 2009, all protohistoric sites from the survey area studied in the middle Raganello valley were catalogued and dated, and comments on individual sites and a first essay were written.

Hellenistic pottery and Hellenistic sites in the Sibaritide (N. Oome)

The catalogue of Hellenistic sites in the survey area was finalized and a start was made on the site classification and interpretation. The first texts were also written.

Subsistence and social stratification in the Sibaritide in the period Middle Bronze Age – Early Iron Age (S. Elevelt)

The study on the bones dataset from Broglio di Trebisacce was finished and an article was prepared for *Palaeohistoria*. This article is one of the chapters in the planned thesis.

Francavilla excavations:

A study of the impasto pottery from the Timpone della Motta di Francavilla Marittima (Calabria, Italy) (C. Colelli)

Impasto fragments from various excavation contexts were drawn, described and dated and a preliminary functional analysis of the collected material was submitted in October.

Archaic terracotta votive offerings from the Athenaion in Francavilla Marittima (Calabria, Italy) (E. Weistra)

During a stay in November 2009 at Sybaris, progress was made on the study of the terracottas. The first objective is to submit an article to the *Bolletino d'Arte* in early 2010.

Roman relations with people outside the Roman Empire (M.C. Galestin)

The object of study was relations between Romans and Frisians, not only in the Roman Empire, where Frisian soldiers entered the Roman army, but also in the native context, where Roman objects arrived in areas outside the Empire. At first, the relationship seems to have been of a military nature, and later of an economic nature. This difference is evident in both the written sources and the archaeological data. Different objects arrived in areas outside the Roman Empire in different periods.

Presentations were given at the International Limes Congress in Newcastle (on cross-frontier relations) and a symposium in Leeuwarden (on the Tolsum writing tablet). Two articles were written on the Tolsum writing tablet and its historical and archaeological context. A writing tablet from Alphen aan den Rijn, a military site on the Limes, which appeared to have some text on both sides, was taken to Oxford for further study. An article on the interpretation of Roman artefacts discovered in the northern part of the Netherlands was accepted for publication.

Standard of living in the Roman Empire (G.M. Klein Goldewijk)

In 2009 the focus was on improving the database on Roman stature. The database has been extended geographically to include the eastern part of the Empire. To this end, Klein Goldewijk visited the Israel Antiquities Authorities and the Hebrew University in Jerusalem.

Roman consumption of bronze and iron: a case study of Pompeii, Herculaneum and the surrounding villas (M.L. Ratliff)

The main question in this research is how prosperous the average Roman was. To this end, data have been collected on bronze (copper alloys) and iron artefacts to determine whether consumption patterns were consistent or whether they varied according to socio-economic status, the presumed value of the materials,

and the locations of the finds. Since joining the GIA in September, Ratliff has focused on the production aspects of copper alloy and iron artefacts. In addition to addressing the Roman standard of living, the study tackles the interrelationship of town and country, the divide between socio-economic classes and the importance of production in consumer choices.

GREECE

NWO VIDI project Shifting Identities (S. Voutsaki)

The NWO VIDI project Shifting Identities is making very good progress. Five articles appeared in 2009 (and another four will probably appear by December 2010), another six have been submitted and seven more are close to completion. The edited volume with the results of the project is in preparation and will be submitted in spring 2010. The Proceedings of the Mesohelladika Conference (which Voutsaki has co-edited) will appear in December 2009 or January 2010. The research on ¹⁴C is completed, while the analysis of houses and households, and the research on imagery and iconography are in progress. In late 2009, an NWO application for a substitution grant was awarded for work in 2010 on the Argos 'Tumuli' project.

The Argos Tumuli Project (S. Voutsaki in collaboration with several specialists and research institutes in different European countries)

The Argos Tumuli Project is making good progress: the chapters on pottery, grave contexts and mortuary practices are being written. A new research grant (\$ 12,247) to cover the costs of the stable isotopes analysis has been awarded by the Institute of Aegean Prehistory. A substitution grant was awarded by NWO, which will allow Voutsaki to complete the Argos 'Tumuli' project in 2010. In addition, Voutsaki has been awarded research leave (under the NWO substitution grant scheme) to complete the publication of the Argos Tumuli Project in 2010.

PhD research within the Shifting Identities Project

Mortuary differentiation and social structure in the Middle Helladic Argolid (E. Milka)

Milka now has a full-time position in the Archaeological Service, which has led to a certain delay. However, she is working on the final chapters of the dissertation, which she hopes to complete in 2010.

Transitional periods in Bronze Age mainland Greece. A household perspective of the development of social differentiation from EH3 to LH1 (C. Wiersma)

The dissertation is making very good progress, with substantial chapters already written or in progress. Wiersma has been awarded several grants, allowing her to fully fund her study. She has also been invited to participate in two other archaeological field projects.

Halos (H.R. Reinders & W. Prummel)

Three rooms in the 'House of the Tub' were investigated in July 2009 by a team of eleven students and two archaeologists, led by Reinders. In November 2009, the coin finds from the house were studied in the new working space at Almiros. The excavation will continue in 2010. A presentation about the house was given at the 3rd congress of Thessalian Studies in March 2010. Prummel and students studied the animal remains from the House of the Tub and the slightly later houses at the Southeast Gate. The material from the House of the Tub proved to be very rich in domestic mammal bones, but shells of marine molluscs were also present. Such remains were also found in the houses at the southeast gate, together with wild mammal and bird bones, and a few fish bones. Hunting, fowling and fishing were obviously more important for the inhabitants of the southeast gate houses than for those of houses in the town, which suggests another type of economy.

PhD research within the Halos Project

House and Households in New Halos, Thessaly (M. Haagsma, assistant professor in Classics, University of Edmonton)

The dissertation was completed and submitted to the supervisors.

UKRAINE

Džarylgač Survey Project (DSP) (P.A.J. Attema (with J.J. Delvigne, T.C.A. De Haas, W. de Neef & C. Williamson) for the GIA and P. Guldager Bilde and her research group for the Black Sea Study Centre (Aarhus, DK))

Following a workshop at the start of the year in Sandbjerg and a study sojourn at Aarhus University itself with all researchers present, the general outline of the final publication of the 2006, 2007 and 2008 field seasons was agreed upon and a number of chapters were written during the year. De Haas, Williamson and De Neef obtained temporary positions at the GIA to work on this publication.

EGYPT

Fayum project (R.T.J. Cappers)

Surveys and excavations were conducted in the Fayum area in September-December. A large-scale survey has begun in the wadis north of Kom K and Kom W. A new Neolithic settlement has been identified. The excavation in Karanis has focused on the eastern part of the settlement, where part of a street and associated buildings have been excavated.

SYRIA

Sabi Abyad (R.T.J. Cappers & Qi Hao)

The processing of samples from the Neolithic period has continued. The focus is on a possible shift in the food economy in response to climatic deterioration around 6200-6000 BC.

TURKEY

Guverçinkyasi (Central Anatlia) (R.T.J. Cappers)

An interim report has been produced dealing with the botanical samples from the Neolithic settlement of Guverçinkyasi. Seventy-five samples contained identifiable plant remains, although in very small quantities. Plant materials interpreted as settlement noise include emmer, hulled barley and lentil.

2.5. ARCTIC ARCHAEOLOGY

2.5.1. Exploration and Exploitation of the Polar Areas

LASHIPA-6 (D. Avango, U.I. Gustafsson, G. Rossnes (Norway) & B.L. Basberg (Norway))

Fieldwork was carried out at South Georgia from 3 March-12 April as part of the international IPY LASHIPA project. The team conducted an archaeological survey, documenting and mapping the modern whaling stations at Prince Olav Harbour and Ocean Harbour. The expedition was carried out in cooperation with the South Georgia Heritage Trust, British Antarctic Survey, the Royal Institute of Technology and the Swedish Polar Research Secretariat.

LASHIPA-7 (L. Hacquebord, H.R. de Haas, E. Bolhuis & F. Steenhuisen)

An archaeological survey and mapping of an old Dutch mining settlement dating from 1920 was carried out on Spitsbergen from 5-12 July as part of the international IPY LASHIPA project. This resulted in a 3D map of the settlement, with all material remains in the settlement's natural environment.

PhD research within the LASHIPA Project

Green Harbour, Spitsbergen, and the international history of exploitation of the polar areas (D. Avango)

Industrial development in the polar regions has been closely related to scientific research there. Firstly, there has been a transfer of knowledge. However, this transfer was never one-directional, from science to industry. In the case of the Spitsbergen mining industry, industry also provided science with important knowledge. Archival and archaeological research within LASHIPA has also shown that the industrial settlements and stations often provided vitally needed transport and shelter to polar scientists. Secondly, there has been a transfer of legitimacy. Scientists have been producing historical narratives in which science is presented as a driver of industrial progress. At the same time, industrialists have presented their activities as based on sound scientific knowledge. With such historical narratives, competitors built actor networks linking contemporary and historical actors with the material remains of historical activities (heritage of science and industry) in the polar areas. These actor networks have been used to attract research funding and investments. In contested territories like South Georgia and Spitsbergen, they have also been used to strengthen demands for sovereignty and political influence.

British exploration, mining, and diplomacy on Spitsbergen, 1897-1953 (F. Kruse)

No Arctic fieldwork regarding this project was scheduled for 2009. Instead, the research focused on archival, literary and online sources, predominantly in the United Kingdom. The National Archives and the Royal Geographical Society (RGS) were consulted in London. The most surprising finds were firstly the existence of several 'Spitsbergen' mining companies that never so much as visited the archipelago prior to bankruptcy. Secondly, the traditionally apolitical Royal Geographical Society took an active part in the geopolitical debates surrounding the islands while the British Foreign Office was not convinced that sovereignty over the islands would benefit the Empire. At the Scott Polar Research Institute in Cambridge, it became apparent that while the Scottish Spitsbergen Syndicate kept thorough accounts of their business venture, other companies are grossly underrepresented in the records. In the United Kingdom at least, the proverbial gold mine of information may only exist in private collections. It is hoped that further pieces of the puzzle can be discovered in Norway and Russia.

The exploitation of natural resources in Green Harbour, Spitsbergen (78°N) during the pre-industrial whaling and hunting period (Y.I. Aalders)

The animal remains from the Russian hunting station of Kokerineset were studied to gain an understanding of the way Russian hunters handled the exploitation of natural resources on Spitsbergen in the 18th century. The study showed that walrus was the hunters' primary target and that bones from other animals were barely represented. Only those parts of the walrus that had a market value were used; the meat was left behind. The animal remains from Kokerineset were then compared to those from the Dutch whaling station of Smeerenburg. The comparison showed that in contrast to the Dutch whalers, the

Russian hunters depended much more on local resources for survival than on provisions brought from their home country.

Rituals and symbols in the struggle for the polar areas and their natural resources (D. Avango)

Research in archives and museums, as well as in the field at South Georgia (Prince Olav Harbour, Grytviken and Ocean Harbour) shows that the remains of former whaling stations there has played, and is still playing, an important role in the struggle for political influence and control over natural resources in this part of the peri-Antarctic. The whaling stations have been re-used for military operations by Argentina and Great Britain, for governing purposes and also as anchor points for competing constructions of history.

Coal exploitation by the NV Nederlandsche Spitsbergen Compagnie on Spitsbergen in its national and international context, 1919-1932 (H.R. de Haas)

Last year was dedicated to completing the collecting of sources necessary for the project. In July 2008, the LASHIPA-7 expedition mapped the former Dutch mining site of Rijpsburg on Spitsbergen and its surroundings, concluding the collection of fieldwork data. The remaining important historical sources were collected during visits to the archives of the Norsk Polar Institute, the Tromsø Statsarkivet and various Dutch archives. The first combined results of both the fieldwork and the historical work were presented at various conferences and seminars, and are in the process of being published.

Development and Decay: a comparative study of four former whaling stations in the Arctic and Antarctic 1904-1931 (U.I. Gustafsson)

Fieldwork was conducted at Prince Olav Harbour, Ocean Harbour and Grytviken/South Georgia. The purpose was to gather data for this research project as well as for other LASHIPA sub-projects. The data collected has provided important information, adding to data from previous Arctic field campaigns and offering valuable and previously untested opportunities for bi-polar comparative analysis of the development of the modern whaling industry in the polar regions. Ongoing analysis shows that the Arctic whaling stations display differences, and that they differ markedly in technical choices, design and spatial layout from the whaling stations in the peri-Antarctic. Important archival data have been gathered in Norway and the United Kingdom.

2.5.2. Environmental Change

Arctic environmental cooperation (AMAP, CAFF and SDWG) (L. Hacquebord, T.K. Terpstra, M.J.J.E. Loonen & F. Steenhuisen)

The Arctic Centre team has participated in several working group meetings of the Arctic Council.

Mercury emission model (F. Steenhuisen)

Steenhuisen took part in the AMAP Heads of Delegation meeting, which began preparations for the future AMAP programme (2010-2015). The 'multimask' mercury emission model was presented at the LRTAP meeting in St. Petersburg, Russia, and the mercury emission model was presented for the GEIA framework at the GEIA 2009 open meeting in Oslo.

BIRDHEALTH (M.J.J.E. Loonen, J. Prop, J. Verhagen, C. Sandström & O. Dolnik)

There is potential for new diseases to emerge in Arctic areas that are warming up. The BIRDHEALTH project tests the health and immune system of breeding birds in the Arctic. Most of the tests are based on a single blood sample, coupled with behavioural observations in the field. In 2009, we continued to collect samples but our main focus was on analyzing them and on some new details. The results are correlational but fit our hypothesis. Arctic populations of Barnacle geese have a less active immune system than in temperate populations. We have found a correlation with growth and survival. Our new topic has been to focus on sampling pathogens in lake water (using molecular techniques) and quantifying ectoparasites in nest lining. More information can be found on the website of the Netherlands Arctic Station: www.arcticstation.nl

Monitoring goose populations (M.J.J.E. Loonen)

Goose populations have increased 30-fold in four decades due to human-induced changes on the wintering grounds. In recent years, these populations have faced a warming Arctic. This project studies an Arctic breeding population of Barnacle geese and their interaction with the rest of the ecosystem (plants and predators). Parameters under study are the timing of migration, nesting and moult. In 2009, the main focus was the timing of migration, using position loggers on wild birds. We were able to identify three different migration strategies, two of which developed very recently, and we are studying the costs and benefits of these strategies with sightings of ringed birds.

PhD research within the Arctic

Surviving Arctic Environmental Change by Migration or Adaptation? (M.E. van Kruining)

This archaeological project started in early December with preparatory reading. The real work in museums and archives will start in 2010.

2.5.3. Science and Politics in Polar Areas

PhD research within the Polar Areas

Protection of cultural heritage in Antarctica and Svalbard (Spitsbergen) (R.M. Roura)

This research used archaeological methods and theory (primarily MB Schiffer 1983, 1987) to describe and interpret the effects of contemporary tourism at historical sites in Antarctica and Svalbard. The results were then reinterpreted from management perspectives. Polar tourism can be described as a behavioural system that follows well-defined patterns and results in specific behavioural traces at the sites in which it takes place. Tourism at historical sites such as those found in Antarctica and Svalbard (Spitsbergen) is therefore a factor of site transformation and, in management terms, a cause of actual and potential impacts on the cultural heritage. However, the transformational effects of tourism need to be analyzed in the context of other local cultural and natural processes affecting historical sites as well as in the broader regional contexts in which the sites are used and managed. The focus of 2009 was to write up research conducted in previous years, including two major publications in peer-reviewed scientific journals, and to finish the dissertation.

Transnational ties, urban networks and identity formation among Inuit migrants in Denmark and southern Canada (T.K. Terpstra)

The work for the PhD project concentrated on conducting preliminary anthropological fieldwork in Canada, Denmark and Greenland. The fieldwork enabled Terpstra to plan the continuation of the project. In addition, Terpstra has concentrated on reading literature about Inuit and migration. He also underwent PhD training, namely a course on publishing in English, and attended two meetings (Nuuk, Greenland and Copenhagen, Denmark) of the Sustainable Development Working Group (SDWG) of the Arctic Council.

3. RESEARCH ACTIVITIES

3.1. FIELDWORK

THE NETHERLANDS

Groningen - Grote Markt Oostzijde, 18 May–11 June. Excavation of the mediaeval city centre of Groningen (AD 10th-20th).

Director : B.P. Tuin, G. Kortekaas (Gemeente Groningen, ROEZ)

Staff : L. Edens

Participants : First year students

Cooperation : B.P. Tuin, G. Kortekaas (Gemeente Groningen, ROEZ), A. Wieringa (ARC bv)

Groningen - Beijumerweg/Koerspad, 18 May–11 June. Coring campaigns aimed at mapping mediaeval ditches and an assumed chapel (Beijum) and mapping the extents of a mediaeval raised dwelling mound at Koerspad.

Director : S. Arnoldussen

Staff : S. Dresscher

Participants : First year students

Cooperation : J. Stöver (RCE), G. Kortekaas (Gemeente Groningen, ROEZ), R. Exaltus (Archeopro)

Harkstede - Meerstad, 18 May–11 June. Fieldschool excavation of a Mesolithic site (flint distribution and hearths).

Director : S. Arnoldussen

Staff : J. Mendelts, R. Fens

Participants : First year students

Cooperation : Gemeente Groningen, ROEZ (G. Kortekaas)

Achlum, 2-26 June. Off-site excavation at the *terp*-site of Achlum.

Director : J.A.W. Nicolay

Staff : S. Tiebackx, R. Kusters, J.T. van Gent

Participants : J. Bloem, K. Blok, D. Postma, A. Clemens, L. Derksen, T. Varwijk, D. de Vries

Cooperation : P.C. Vos (Deltares), H. Huisman (RCE)

Kuinre, 2-29 June. Excavation of a shipwreck from around 1600 at agricultural lot R4 in Flevoland.

Director : A.F.L. van Holk

Staff : J. Vermeersch (RCE), D. Velthuisen (Nieuw Land), G. Schreurs (RCE)

Participants : J. Verweij, M. van Geffen, E. de Vries, L. Derksen, A. Clemens, M. van Vuuren (UL), C. Geerdink (UL), A. Bijl (UL), volunteers from the Archeologische Werkgroep Nederland, afdeling Flevoland

Cooperation : J. Vermeersch (RCE), G. Schreurs (RCE), D. Velthuisen (NLE)

Swifterbant S25, 10-28 August. Coring campaign of the Middle Neolithic settlement site S25 simultaneous with the excavation of the bank of S25.

Director : D.C.M. Raemaekers

Staff : I. Woltinge, M. Schepers

Participants : C. de Boer, E. Scheele, L. Kiers, J. Kuyper, M. Piket, N. Bukala (students), K. Groothoff, R. Verboon, J. Eelman (volunteers Archeologische Werkgemeenschap Nederland)

Cooperation : D. Velthuisen (NLE), H. Huisman (RCE)

ITALY

Crustumerium

Crustumerium (Rome), 22 June–9 August. Excavation of tombs on Iron Age-Archaic necropolis Monte Del Bufalo.

Director : P.A.J. Attema, A.J. Nijboer

Staff : P.A.J. Attema, S. Boersma, A.J. Nijboer, G.J.M. van Oortmerssen, S.L. Willemsen

Participants : E. Anema, M. Bakker, M. Bannink, L. van Bruggen, S. Droogsma, F. Heinrich, J. Hilbrants, M. Hondelink, E. Hopman, S. Huizing, N. Jager, T. Kauling, T. Lanjouw, T. Maliepaard, Y. van Popta, W. Pouille, M. Schuiten, D. Spiekhout, T. Trienen, K. van der Veer, I. van der Velde, F. Westra, T. van Wijck, T. Wolthuis

Cooperation : SSBAR (Soprintendenza Speciale per i Beni Archeologici di Roma): F. di Gennaro, B. Belevi & W. Pantano

Pontine Region

Sermoneta, 16 February–3 March. Studies of artefacts collected during Norba 2008 survey.

Director : T.C.A. de Haas

Staff : T.C.A. de Haas

Participants : L. de Haas-Rietveld

Cooperation : C. Anastasia

Sermoneta, 4-22 May. Trial trench through MBA settlement at Tratturo Caniò.

Director : H. Feiken

Staff : G. Tol, C. Anastasia, S. Tiebackx

Participants : M. van Kruining, D. Ewolds, T. van Loon

Cooperation : J. Sevink (UvA), P. Vos (NITG), N. Cassieri (Sopr. per il Lazio)

Calabria

San Lorenzo Bellizzi, 28 February–21 March. Obtaining soil samples and gathering more soil information with corings in the La Maddalena Catchment for CALEROS.

Director : H. Feiken

Staff : E. Bolhuis

Participants : D. Smulders, R. Van Beek (both Utrecht University)

Francavilla Marittima, 30 May–21 June. Study and documentation of RAP/HL finds 2000-2008.

Director : P.M. van Leusen

Staff : W. de Neef, T. Lanjouw, S. Boersma, F. Ippolito

Cooperation : L. Alessandri

Francavilla Marittima, 2-11 November. Study and documentation of RAP/HLP finds, 2000-2008.

Director : P.M. van Leusen

Staff : P.A.J. Attema

Cooperation : W. de Neef, L. Alessandri

Francavilla Marittima, June-August and September-December, excavations in the sanctuary and settlement of Timpone della Motta.

Director : P.A.J. Attema, J.K. Jacobsen (field director)

Staff : *Scientific staff*: G.P. Mittica, M. D'Andrea. *Trench masters*: C. Colelli, K. Thomsen, C. Cogar. *Topography*: B. Amedeo, E. Donato. *Archaeo-botanists*: D. Novellis. *Archaeozoology*: N. Perone. *Archaeometry*: A. Eliana

Participants : *GIA students*: L. Broekstra, M.A. Shareijenberg, A. Stenvert, D. van Tienhoven, N. Vukkink. *Basel University*: J. Baerlocher, J. Hevi. *Aarhus University*: S. Bruun, S. Krag, S. Saxkjaer, K. Thomsen, L. Thornald, H. Thusing, S. Andreasen, W. Bendsen, D. Hjort, S. Weidemann. *University of Calabria*: L. Altomare, A. Annuzzi, A. Barcellona, L. Chiodo, M. D'Acri, L. d'Agostino, M. de Fazio, E. de Stefano, M. de Tommaso, L. Dominici, M. Mittica, V. Montesano, R. Pipari, F. Pantusa, A. Pugliese, A. Scalone, G. Scarpelli, A. Schiavello, G. Scoleri, V. Malomo, I. Mammola, S. Marcella, M. Gabriele. *Lecce University*: F.R. de Castro. *Other universities and volunteers*: K. Civetta, L. Granata, E. Kesseli, P. Ortelli, F. Scarpini, V. Tolstoy, M. Urso, M. Costantino, M. Crudo, R. Mittica, F. Piccin, G. Tenuta, M. Veneziano, C. di Lorenzo.

GREECE

Ayios Vasileios, 10-20 July. Excavation at Mycenaean site Ayios Vasileios.

Director : A. Vassilogamvrou (head of Laconia Ephorate)

Staff : S. Voutsaki, V. Aravatinos, specialists

Participants : Members of the Laconia Ephorate (archaeologists, draughtsmen, topographers, conservators)

Halos, July. Excavation of the House of the Tub in Hellenistic Halos.

Director : H.R. Reinders

Staff : P. de Roever

Participants : M. Admiraal, W. Bakker, F. Boersema, J. Dijkstra, T. Dijkstra, H. Duinker, M. Feenstra, F. Hitzert, S. Kaaik, L. Spoelstra, D. Timmerman

Cooperation : 13th Ephorate of Prehistoric and Classical Antiquities

EGYPT

Fayum, 15 September—31 December. Survey and excavation of Neolithic sites and Roman Karanis.

Director : R.T.J. Cappers, W.Z. Wendrich

Staff : R.T.J. Cappers, S. Tiebackx

Participants : *Archaeologists Neolithic, New Zealand*: T. Barker, K. Ditchfield, J. Emmitt, S. Holsaway, S. Nasoordeen, R. Phillips, N. Philips. A. Austin (zooarchaeologist, USA), H. Barnard and S. Tiebackx (surveyor, Netherlands), M. Boere (assistant, Netherlands), J. Bos (site management specialist), M. Chin-Perez (registrar, USA), E. Cole (trench supervisor), Sonali (assistant Canada), T. de Wit (ceramic specialist Neolithic, Netherlands), S. Gupta (ceramicist Greco-Roman, India), F. Herbin (archaeologist, France), D. Jones (archaeologist, UK), L. Klerkx (wood specialist's assistant, Netherlands), T. Linnell (archaeologist Neolithic, Ireland), V. Linseele (zooarchaeologist, Belgium), C. Long (photographer, USA), B. Simpson (trench supervisor, USA), E. Sullivan (terracotta specialist, USA), A. Susak (trench supervisor, USA), S. Thys (zooarchaeologist, Belgium), C. Vermeeren (wood specialist, Netherlands), D. Warne (trench supervisor, USA), W. Wendrich (director, Netherlands), D. Whitmore (Illustrator, USA), R. Zineldeen (archaeologist, Netherlands). *Field school students USA*: L. Banashek, L. Cowin, K. Eklund, B. Gilliland, N. Lal, N. Marquez, C. Panico, C. Taylor, A. White, A. Yanik, N. Ngyuyn.

THE POLAR REGIONS

South Georgia/Antarctica, 3 March–12 April. Survey, documentation and mapping of modern whaling stations at Prince Olav Harbour and Ocean Harbour.

Director : D. Avango

Staff : U.I. Gustafsson, B.L. Basberg (Economic History, NHH, Norway), G. Rossnes (National Heritage Board, Norway)

Cooperation : South Georgia Heritage Trust, British Antarctic Survey, Royal Institute of Technology, Swedish Polar Research Secretariat

Nuuk, Greenland, 13-22 June. Preliminary anthropological fieldwork.

Staff : T.K. Terpstra

Copenhagen, Denmark, 1-31 May. Preliminary anthropological fieldwork among Greenlanders living in Denmark.

Staff : T.K. Terpstra

Jutland, Denmark, 9-13 September. Anthropological fieldwork among Greenlanders living in Denmark.

Staff : T.K. Terpstra

Ny-Ålesund, Spitsbergen, 10 June–18 August. BIRDHEALTH and ecosystem monitoring barnacle geese at the Netherlands Arctic Station.

Director : M.J.J.E. Loonen

Staff : J. Prop (til 30 April), J. Verhagen (15 Jan–15 May), C. Sandstrom (1 Oct–31 Dec), O. Dolnik (1 Nov 2009–28 Feb 2010)

Participants : *RUG students*: A. Goedknecht, F. Schaafsma, E. Biersma. *UvA student*: T. Oudman.

Field assistants: J. Loonen, O. Dijk.

Analysing data (Nov-Dec): M. Schouten, L. Veldhoen (Van Hall Institute, Leeuwarden)

Cooperation : *Dutch Herbarium Leiden*: M. Stech, H. Kruijer. *University of Antwerp*: L. Fivez. *Vrije Universiteit Amsterdam*: J. Rozema

Rijpsburg, Bohemanflya, Spitsbergen, 5-12 July. Surveying and mapping of an old Dutch mining town dating from 1920.

Director : L. Hacquebord

Staff : E. Bolhuis, F. Steenhuisen, H.R. De Haas

Edmonton, South Canada, 28-30 September. Preliminary anthropological fieldwork among Inuit.

Staff : T.K. Terpstra

3.2. LECTURES AND POSTER PRESENTATIONS

Aalders, Y.I.

- 6-7 March, Middelburg (Netherlands): End of the Dutch International Polar Year, 'The use of natural resources by Russian walrus hunters in Green Harbour, Spitsbergen'.
- 23 April, Groningen (Netherlands): Swedish Royal visit to the University of Groningen, poster presentation archaeological fieldwork on Spitsbergen.
- 28-31 July, Barcelona (Spain): Research Design Course 2009, 'The Exploitation of the Natural Resources in Green Harbour, Spitsbergen (78°N) in the Pre-Industrial Whaling and Hunting Period'.
- 31 October, Groningen (Netherlands): WBPI Symposium 'Sustainable Use of Resources in Polar Regions', poster presentation 'The exploitation of the natural resources in Green Harbour, Spitsbergen (78°N)'.
- 1-5 November, St. Petersburg (Russia): Annual workshop LASHIPA, 'Perceptions of Polar Resources: a comparison of the animal remains of the Dutch whaling station Smeerenburg and the Russian hunting station Kokerineset'.

Arnoldussen, S.

- 16-22 March, Berlin (Germany): Haus-Gehoft-Weiler: Siedlungen der vorrömischen Eisenzeit im nördlichen Mitteleuropa, 'Die Entwicklung der eisenzeitlichen Häuser und Siedlungen in den nördlichen Niederlanden' (with H.T. Waterbolk).
- 6 October, Assen (Netherlands): Lecture series DPV, 'Behoudszuchtige vrienden van het oude. Bronstijdbewoning in Drenthe bezien in breder verband'.

Attema, P.A.J.

- 31 January, Amsterdam (Netherlands): Satricum day 2009, 'Bewoning van het dal van de Astura, van Bronstijd tot Middeleeuwen'.
- 17 February, London (UK): University of London, Accordia, the Italy Lectures 2008-2009, 'Upland settlement archaeology in the hinterland of Sibaris, the Raganello Project'.
- 6 March, Nettuno (Italy): Presentation of the publication *Nettuno, Il Territorio dalla Preistoria al Medioevo. La Carta Archaeologica Nettuno* (P.A.J. Attema, T.C.A. de Haas & G.W. Tol), 'Nettuno: Il territorio di Nettuno, un paesaggio a lunga durata' (keynote lecture) (with contributions by L. Alessandri & G.W. Tol).
- 26 March, Groningen (Netherlands): 18th Archaeology and Theory Symposium, 'Teaching Archaeological theory in Groningen: present situation and future possibilities'. Contribution to the session: Archaeological Theory in Dutch Universities organised by S. Voutsaki.
- 3 April, Ann Arbor, Michigan (USA): 8th Conference of Roman Archaeology, 'Current approaches to the Archaeology of First Millennium BC Italian Urbanism'. Final discussion.
- 5 April, Ann Arbor, Michigan (USA): 8th Roman Archaeology Conference, 'Experiences of the Regional Pathways Project (Central and South Italy): a Comparative View on the Roman landscape in Three Italian regions'. Prepared with G.J. Burgers (Royal Dutch Academy at Rome).
- 1-2 May, Berlin (Germany): 17th Workshop on Archaeological Field Survey, 'Hellenistic and Early Roman rural landscapes in Central and South Italy'. The regional Pathways Project.
- 14 November, Groningen (Netherlands): Research and Alumni day GLTC, 'Een Griekse episode: Hellenistische nederzettingen in het zuidwesten van de Krim, resultaten van het Džarylgač Survey Project'.
- 17 November, Basel (Switzerland): Lecture for students, researchers and Freunde Antiker Kunst Sektion Basel, Archäologisches Seminar of the University of Basel, 'The International Francavilla Archaeological Project, History, results and perspectives of a long term research project'.
- 18 November, Zürich (Switzerland): Lecture for students, researchers and Freunde Antiker Kunst sektion Zürich, Archäologisches Institut, Universität Zürich, 'Landscape Archaeology in the Sibaritide, South Italy, from the Bronze Age to the Hellenistic period'.
- 30 November, Kiel (Germany): Invited research paper Graduate School for Human Development in Landscapes, University of Kiel, 'The Raganello Archaeological Project, results and perspectives'.

Avango, D.

- 6 April, Mikheev (South Atlantic): South Georgia Heritage Trust, 'Industrial Archaeology in the Polar Areas: The LASHIPA project at South Georgia'.
- 6 September, Iqaluit (Nunavut, Canada): Conference BOREAS, 'Out of the Cold: Scientific Ways of Knowing in Histories of the Circumpolar Arctic', 'Constructing Polar histories through science and industry' (keynote lecture).
- 22 October, Groningen (Netherlands): WBPI symposium 'Sustainable Use of Resources in the Polar Regions', concluding remarks.
- 23 October, Groningen (Netherlands): WBPI symposium 'Sustainable Use of Resources in the Polar Regions', 'Constructing Polar histories through science and industry' (keynote lecture).
- 2 November, St. Petersburg (Russia): LASHIPA project conference 'History of Resource Exploitation in Polar Areas', 'Constructing Polar histories through science and industry' (keynote lecture).
- 4 November, St. Petersburg (Russia): LASHIPA project conference 'History of Resource Exploitation in Polar Areas', 'The essence of the adventure': narratives of Arctic work and engineering in the early 20th century' (keynote lecture).

Cappers, R.T.J.

- 14 February, Leiden (Netherlands): Sabi Abyad Day 2009, 'Archeobotanisch onderzoek: plantaardige resten van Tell Sabi Abyad' (keynote lecture).
- 14 May, Amsterdam (Netherlands): Inqua-NL Symposium, 'Palaeoecology of the Middle East in relation to human activity' (keynote lecture).
- 15-20 May, Adana (Turkey): International workshop on cereal diversity, plant domestication and human history in the fertile crescent, 'Diploid or Tetraploid? Morphologic and genetic evidence of two grained einkorn and one-grained emmer wheat' (keynote lecture).
- 15 June, Cairo (Egypt): International workshop on African Archeobotany, 'The reconstruction of cereal fields in Roman Egypt' (keynote lecture).
- 12 December, Leiden (Netherlands): Workshop in honour of Dr G. van der Kooij on the occasion of his retirement, 'The reconstruction of agricultural practices' (keynote lecture).

Feiken, H.

- 15-17 April, Sheffield (UK): University of Sheffield, Department of Geography, Congress Geoarchaeology 2009 - Landscape to laboratory, 'CALEROS: An Erosion-Deposition model for landscape archaeology'.

Galestin, M.C.

- 11 February, Groningen (Netherlands): HOVO, 'Kalkriese: Archeologie van een veldslag'.
- 21 March, Groningen (Netherlands): Alumni day GLTC, 'Kalkriese: Archeologie van een veldslag'.
- 24 April, Leeuwarden (Netherlands): Symposium Tolsum, 'Terug naar Tolsum: de archeologische en historische context' (keynote lecture).
- 19 August, Newcastle (UK): 21st International Congress of Roman Frontier Studies, 'Relations across the northern Frontier'.

Groenendijk, H.A.

- 23 September, Delfzijl (Netherlands): 50th anniversary of salt company Akzo-Nobel, guiding tour former employees in Oldambt.
- 5 November, Oudeschans (Netherlands): Stichting Landschap Oldambt, 'Inleiding op de archeologie van het Oldambt'.
- 1 December, Assen (Netherlands): Drents Prehistorische Vereniging, 'Overgangslandschappen zijn interessante onderzoeksobjecten. Het gelaagde landschap van Groningen'.
- 8 December, Froombosch (Netherlands): 15th anniversary study group Natuur en Landschap Duurswold, 'De vroege bewoning van Duurswold'.

Gustafsson, U.I.

- 15 May 2008 – 15 May 2009, Groningen (Netherlands): Arctic Minor II, 'Modern Whaling – An overview of a Polar industry'.
- 1 April, Onboard expedition vessel Grigoriy Mikheev (Antarctic): South Georgia Heritage Trust, 'Drake Passage: The LASHIPA 6 Expedition & Prince Olav Harbour and Ocean Harbour whaling stations'.
- 25 November, Groningen (Netherlands): Arctic Minor II, 'The Modern Whaling Industry – An overview'.

25 November, Groningen (Netherlands): Arctic Minor II, 'Deconstructing the Svend Foyn myth – The development of the modern whaling industry in the circumpolar Arctic 1870-1910'.

Haas, H.R. de

23 February, Groningen (Netherlands): Imaka, 'Rotterdamse ondernemers, steenkool & geopolitiek. De N.V. Nederlandsche Spitsbergen Compagnie, 1919-1932'.

6 March, Middelburg (Netherlands): Poolbelevenis, 'The coalmining activities of the N.V. Nederlandsche Spitsbergen Compagnie, 1919-1932'.

21 March, Den Haag (Netherlands): Museon, Pool tot Pool Symposium, 'Nederland en het Spitsbergen-Vraagstuk, 1900-1927. De economische en politieke strijd om Spitsbergen'.

31 October–5 November, St. Petersburg (Russia): LASHIPA workshop, 'Business opportunity or speculative bubble? A comparative case-study on the Dutch commercial mining interests on Spitsbergen, 1915-1932'.

Haas, T.C.A. de

5 April, Ann Arbor (USA): Roman Archaeology Conference, 'Beyond dots on the map: exploring the potential of intensive survey for interpreting small sites and non-site artefact distributions'.

6 June, Leuven (Belgium): ROCT seminar, 'Investing in the colonia and ager of Antium'.

16 September, Nijmegen (Netherlands): Guest lecture 'De Romeinse kolonisatie en exploitatie van drie landschappen: surveyonderzoek in de Pontijnse regio (Midden-Italië)'.

30 October, Ezinge (Netherlands): Fransum Colloquium, 'Roman colonization and exploitation of the Pontine Region: a comparison of three landscapes'.

18 December, Pontinia (Italy): Convegno on the occasion of the 75th anniversary of Pontinia, 'L'occupazione della zona di Pontinia in epoca romana'.

Hacquebord, L.

15 January, Olderterp (Netherlands): Senioren Commerciële Club Friesland, 'Klimaatveranderingen in het Noordpoolgebied' (keynote lecture).

23 January, Bedum (Netherlands): Rotary Groningen Noord, 'Winsum-Obergum: geschiedenis van een tweelingdorp' (keynote lecture).

3 February, Winsum (Netherlands): Historische Vereniging, 'Winsum-Obergum: geschiedenis van een tweelingdorp' (keynote lecture).

5 February, Burgum (Netherlands): Probus, 'Klimaatverandering in het Poolgebied' (keynote lecture).

5-6 March, Middelburg (Netherlands): IPY closing Symposium, 'LASHIPA or Large Scale Historical Exploitation of the Polar Areas' (keynote lecture).

11-13 March, Berlin (Germany): Congress German Ministry of Foreign Affairs, 'Resource Exploitation and Navigation in a Changing Arctic' (keynote lecture).

23-27 March, Bergen (Norway): Arctic Science Summit Week, 'Human and Social System in IASC' (keynote lecture).

14 April, Amsterdam (Netherlands): Studium Generale/SIB University of Amsterdam, 'Van wie is de Noordpool?' (keynote lecture).

26 May, Groningen (Netherlands): Senior day Faculty of Arts, University Groningen, 'Werken aan de grenzen van het weten: archeologisch onderzoek op Spitsbergen' (keynote lecture).

18-19 June, Sandefjord (Norway): 3rd Symposium on Whaling & History, 'Dutch and English Whaling stations on Spitsbergen (Svalbard)' (keynote lecture).

30 October, Den Haag (Netherlands): Clingendael, 'Nederland en de Noordpool: Hoe nu verder' (keynote lecture).

31 October–5 November, St. Petersburg (Russia): LASHIPA workshop, 'Back to the Future. Geopolitics, Oil and Gas and Shipping' (keynote lecture).

31 October–5 November, St. Petersburg (Russia): 'God and the Arctic Survivors. Representation of the Arctic Nature in 17th Century European Wintering Logbooks' (keynote lecture).

14 November, Volendam (Netherlands): Alkwin College, 'Klimaatverandering in het Poolgebied' (keynote lecture).

11 December, Groningen (Netherlands): Minisymposium Science, 'Shipping and geopolitics in the Canadian Arctic', introduction (keynote lecture).

16 December, Leeuwarden (Netherlands): Symposium Hogeschool Van Hall Larenstein, 'Rijkdom van de Polen. Getouwtrek om de Polen. Geopolitiek' (keynote lecture).

28 December, Paterswolde (Netherlands): Rotary Club Groningen Noord, 'Van wie is de Noordpool?' (keynote lecture).

Holk, A.F.L. van

30 August, Lelystad (Netherlands): Opening of Nieuw Land exhibition, 'Vergane schepen, maritieme archeologie op nieuw land'.

6 September, Lelystad (Netherlands): Exhibition tour 'Vergane schepen, maritieme archeologie op nieuw land'.

25 October, Lelystad (Netherlands): Nieuw Land exhibition 'Vergane schepen, maritieme archeologie op nieuw land', lecture 'Romeinse schepen gevonden bij de Meern, gemeente Utrecht'.

18 November, Lelystad (Netherlands): Introductory lecture visit of the Research institute for the heritage and history of the Cultural Landscape and Urban Environment (CLUE) and Rijksdienst voor het Cultureel Erfgoed (RCE), 'Het maritieme cultuurlandschap van de Zuiderzee'.

21 November, Vlaardingen (Netherlands): Annual meeting of the Vereniging voor Zeegeschiedenis, 'De Zuiderzee als verkeersplein, binnenvaart en visserij'.

Jacobsen, J.K.

16 November, Basel (Switzerland): Archäologisches Seminar Basel University, 'A second Pithekoussai on the South Italian Ionian coast'.

16 November, Basel (Switzerland): Archäologisches Seminar Basel University, 'Recent excavations on the Timpone della Motta at Francavilla Marittima in Southern Italy. Cultural transformation in the Sibaritide 800-610 BC'.

Klein Goldewijk, G.M.

3-7 August, Utrecht (Netherlands): World Economic History Conference, poster presentation 'Stature and the standard of living in the Roman Empire'.

Kruse, F.

6-7 March, Middelburg (Netherlands): Polar Experience 2009, poster presentation 'British Mining on Spitsbergen 1898-1952'.

26 March, Groningen (Netherlands): 18th Archaeology & Theory Symposium, 'Theory versus fieldwork: an unbridgeable chasm?'

13 June, Redruth (UK): 8th International Mining History Congress, 'British exploration, mining and diplomacy on Spitsbergen, 1898-1952'.

22-23 October, Groningen (Netherlands): WAPI Symposium, poster presentation 'British Mining on Spitsbergen 1898-1952'.

2 November, St. Petersburg (Russia): LASHIPA Conference, 'Spitsbergen – Imperialists beyond the British Empire'.

Leusen, P.M. van

18 September, Riva del Garda (Italy): EAA conference 2009, 'Geomorphometry: formalizing archaeologists' intuitions about land form'.

3 December, Den Haag (Netherlands): Study day Spatial Analysis (CAA-NL), 'Geomorphometry: formalizing archaeologists' intuitions about land form'.

4 December, Leiden (Netherlands): Mediterranean survey workshop 2009, 'Extracting information from modern survey databases' (with T.C.A. de Haas).

Loonen, M.J.J.E.

23 January, Oosterwolde (Netherlands): Science Alliance, 'The Arctic a changing environment' (keynote lecture).

5 February, Oslo (Norway): EU-FP7 preparation workshop SIOS, 'Research of the Arctic Centre of the University of Groningen on Spitsbergen'.

5 March, Middelburg (Netherlands): IPY closing Symposium, 'Health of Arctic and Antarctic bird populations' (keynote lecture).

25 March, Bergen (Norway): Arctic Science Summit Week, 'Dynamics of bird diseases and their risk for human health'.

7 May, Oslo (Norway): Svalbard Science Forum workshop, 'Barnacle Goose Studies on Spitsbergen'.

- 7 May, Oslo (Norway): Svalbard Science Forum workshop, 'Studies in plant-animal interaction' (keynote lecture).
- 2 September, Bussum (Netherlands): Gooise alumni kring University Groningen, 'The Arctic and the University of Groningen' (keynote lecture).
- 10 December, Haren (Netherlands): Koninklijke Nederlandse Natuurhistorische Vereniging afdeling Groningen, 'Ganzen: van Nederland naar Spitsbergen' (keynote lecture).
- 16 December, Leeuwarden (Netherlands): Symposium Hogeschool Van Hall Larenstein, 'De biologische rijkdom van de Polen' (keynote lecture).

Matthews, S.G.

- 15-20 September, Riva del Garda (Italy): European Association of Archaeologists Annual Conference 2009/Session: New approaches on studying weaponry of the European Bronze Age, 'Revisiting 'Swords and Sequence': The chronology and typology of Atlantic swords in Northwest Europe'.
- 30 October–1 November, Vienna (Austria): Warfare in Bronze Age Europe: Manufacture and Use of Weaponry, 'Atlantic weapons at the Penard-Wilburton transition'.
- 11 December, Groningen (Netherlands): Annual meeting GIA, 'The Atlantic 'feasting and fighting' complex of the Dutch Later Bronze Age'.

Nicolay, J.A.W.

- 7 September, London (UK): British Museum, PAS conference, 'Metal detection in the Netherlands: the law and reality'.
- 6 November, Bremerhaven (Germany): Marschenratskolloquium 2009, 'Tidal gullies, landing places and inter-regional exchange: the coastal area of the northern Netherlands'.

Nieuwhof, A.

- 7 March, Leeuwarden (Netherlands): Lecture day Stichting Verdrongen Geschiedenis, 'De vroegste bewoning van het kweldergebied, aan de hand van recente opgravingsgegevens'.
- 1 April, Wilhelmshaven (Germany): 12th International Scientific Wadden Sea Symposium, 'Living in a dynamic landscape: developments in the archaeology of the Northern Netherlands coastal area'.
- 13 June, Groningen (Netherlands): Groningen Museum's night of art and science, 'Voor-Christelijke rituelen in het wierdenland'.
- 21 September, Maastricht (Netherlands): International Sachsensymposium, 'Discontinuity in the northern Netherlands coastal area at the end of the Roman Period'.
- 19 November, Nes, Ameland (Netherlands): Meeting Historische Vereniging St. Olle Polle, 'Terpen en kwelders. Prehistorische bewoning langs de Waddenzee'.

Nijboer, A.J.

- 4-7 March, Amsterdam (Netherlands): Amsterdam expert meeting 'New perspectives on Ancient Pottery', 'Some notions on the relation between archaeology and the macro and micro analyses on ceramics'.

Overmeer, A.B.M.

- 1 September, Deventer (Netherlands): Waterbodems Hogeschool Saxion Next, 'Scheepsbouwontwikkeling in Nederland van Prehistorie t/m WOII'.
- 25 October, Lelystad (Netherlands): Nieuw Land exhibition, 'Vergane schepen, maritieme archeologie op nieuw land', lecture 'Onderwaterarcheologie'.
- 5 November, Lelystad (Netherlands): Nieuw Land Erfgoedcentrum, presentation state of affairs PhD research.
- 7 November, Lelystad (Netherlands): Two lectures for Landelijke Werkgroep Archeologie Onder Water (LWAOW-AWN), 'Scheepsbouwontwikkeling in Nederland van Prehistorie t/m WOII' and 'Methoden en technieken', in course 'Maritieme Archeologie', Rijksdienst voor het Cultureel Erfgoed (RCE).

Peeters, J.H.M.

- 20 October, Leiden (Netherlands): Workshop 'The Perception of the Environment', lecture 'Time nodes and Hunter-gatherer landscape perception'.

Prummel, W.

- 14 February, Nuis (Netherlands): Annual meeting Vereniging voor Terpenonderzoek, 'Archeozoologisch onderzoek naar wierden en terpen'.
- 11 March, Deventer (Netherlands): Science Café Deventer Burgerweeshuis, 'Dieren en rituelen van de mens' (keynote lecture). Evening at the occasion of the start of the 'Deventer Boekenweek' 2009 with the theme 'De literaire zoo'.
- 4 November, Assen (Netherlands): Drents Prehistorische Vereniging, 'Archeozoölogie. Wat vertellen resten van dieren over het vroegere leven van de mens'.
- 7 December, Athens (Greece): Conference Geosciences and Archaeology: Reading the archaeological landscape, 'Archaeozoological research in the Almirós and Soúrpi Plains: taphonomy'.

Raemaekers, D.C.M.

- 12 February, Amersfoort (Netherlands): NOAA lecture, 'Swifterbant: tijd en ruimte in een micro-regio'.
- 26 February, Dronten (Netherlands): Press meeting, 'Op het spoor van de oudste akker...'

Roura, R.M.

- 22 September, Groningen (Netherlands): Symposium 'Sustainable Use of Resources in Polar Regions', 'Monitoring the transformation of historic features in Antarctica and Svalbard: Local processes and regional contexts' (keynote lecture).
- 4 November, Groningen (Netherlands): Minor Arctic Studies, 'Tourism in the Polar Regions'.

Steenhuisen, F.

- 31 March–3 April, St. Petersburg (Russia): HTAP Workshop focusing on Eastern Europe, Central Asia, and the Arctic, 'Geospatial Distribution of Emissions Global anthropogenic emissions of mercury as an example of a generic problem'.
- 26 October, Oslo (Norway): GEIA-Accent Open Conference 2009, 'Geospatial Distribution of Global anthropogenic emissions of mercury'.

Terpstra, T.K.

- 4 March, Groningen (Netherlands): Scandinavian Literature Course, 'Literature from the Faroe Islands and Greenland'.
- 13 May, Copenhagen (Denmark): Research Seminar, Department of Eskimology, 'Transnational ties, urban networks and identity formation among Inuit migrants in Southern Canada and Denmark'.
- 5 October, Whitehorse (Canada): 9th ACUNS International Student Conference on Northern Studies and Polar Regions Arctic Social Scientists and Fieldwork in Urban Areas, 'The Case of Greenlandic Migrants in Danish Cities'.

Thilderqvist, J.G.M.

- 27 March, Groningen (Netherlands): 18th Archaeology & Theory Symposium, 'Approaching Ritual in Archaeology'.

Voutsaki, S.

- 8 May, Rome (Italy): International Conference on Violence and Warfare in the European Bronze Age, poster presentation 'Violence, power and prestige in Mycenae'. Additionally, member of the panel judging the posters, response to the key-note lecture, and chair of a session discussion.
- 13-16 November, Los Angeles (USA): International Conference Construction of value in the ancient world, 'From value to meaning, from things to persons'.
- 11 December, Groningen (Netherlands): Annual meeting GIA, 'Houses and households in MH Lerna'.

Willemsen, S.L.

- 30 October, Ezinge (Netherlands): Fransum Colloquium 'Advances in the Archaeology of Latium Vetus', research questions for Crustumerium.
- 21 November, Rome (Italy): Deliciae Fictiles IV, 'Amazons in pre-Roman central Italy. Symbols of a new era'.
- 11 December, Groningen (Netherlands): Annual Meeting GIA, 'Het Monte del Bufalo grafveld te Crustumerium (Rome)'.

Woldring, H.

21 February, Schokland (Netherlands): Lecture for De Vrienden van Schokland, 'Palynologie: techniek en toepassing van pollenonderzoek'.

Woltinge, I.

3 June, Groningen: Annual Symposium of Faculty of Chemistry, 'All about chemistry? An incomplete overview of the application of chemistry in archaeology'.

14-20 September, Riva del Garda (Italy): Annual meeting EAA, 'Palaeogeology and sedimentology as indicators for archaeologically relevant levels in the Dutch province of Flevoland'.

3.3. WORKING VISITS

Attema, P.A.J.

- 4-7 January, Sandbjerg (Danmark): Aarhus University, Džarylgač Survey Project publication workshop by the GIA and the Centre for Black Sea Studies (with T.C.A. de Haas, C. Williamson & W. de Neef).
- 11-25 January, Rome (Italy): Royal Dutch Institute, publication meeting Regional Pathways to Complexity and Carta Archeologica di Nettuno.
- 24 November, Leiden (Netherlands): Third annual Bijvanck lecture ‘the Ulu Burun shipwreck and Late Bronze Age maritime trade in the Eastern Mediterranean’ by Prof. Cemal Pulak.
- 11 December, Groningen (Netherlands): Annual meeting GIA.

Avango, D.

- 15-16 January, Stockholm (Sweden): Meeting with the excom of the Swedish Committee for the International Polar Year.
- 23 April, Stockholm (Sweden): Meeting with the excom of the Swedish Committee for the International Polar Year.
- 1 June, Stockholm (Sweden): Final meeting of the Swedish Committee for the International Polar Year.
- 9-11 September, St. Johns (New Foundland, Canada): Presenting the LASHIPA project to researchers in Canadian mining history, for future research cooperation with the Arctic Centre.

Cappers, R.T.J.

- 7 November, Groningen (Netherlands): Visit Drents Prehistorische Vereniging.
- 11 December, Groningen (Netherlands): Annual meeting GIA.

Feiken, H.

- Multiple working visits to Utrecht (Netherlands): University Utrecht, Department Physical Geography (Dr R. van Beek and Dr T. van Asch) in relation to Caleros.
- Multiple working visits to Utrecht (Netherlands): TNO Utrecht (F. Bunnik and T. Donders) for analysis of pollen samples Graben-investigations.
- 28 January and 11 June, Delft (Netherlands): NCL for OSL-samples.
- 29 January, Utrecht (Netherlands): TNO (P. Vos, J. Sevink (with M. van Leusen)), in relation to the Graben-investigations.
- 30 January, 24 November and 8 December: TNO (F. Bunnik and T. Donders) for pollen samples.
- 11 June, Leiden (Netherlands): University Leiden, Faculty Archaeology (W. Kuijper), in relation to Shell samples Graben-investigations.
- 23 September, Leiden (Netherlands): University Leiden, Faculty Archaeology (R. van Beek & R. Cappers), in relation to botanical part of Caleros.

Gijn, A.L. van

- 29-30 January, Paris (France): Arkeotek meeting.
- 26 February–2 March, St. Juan les Pins (France): ESF project EARTH (Early Agricultural Remnants and Technical Heritage).
- 20-24 April, Barcelona (Spain): IXNOΣ meeting, invited as speaker.

Groenendijk, H.A.

- 11 December, Groningen (Netherlands): Annual meeting GIA, session leader.

Gustafsson, U.I.

- 16-17 April, Amsterdam (Netherlands): Posthumus Research Design course (2nd session).
- 24 April, Utrecht (Netherlands): Posthumus PhD Conference (3rd session).
- 17 June–2 July, Sandefjord (Norway): Whaling conference ‘Whaling and History III’, and presentation of an article and archival work in Sandefjord and Oslo.
- 27 July–3 August, Barcelona (Spain): Posthumus Research Design Course (4th session).
- 22-23 October, Groningen (Netherlands): Willem Barentz Polar Institute Symposium.

31 October–5 November, St. Petersburg (Russia): LASHIPA International workshop.

Haas, H.R. de

21 June–1 July, Tromsø (Norway): Archival research at the Tromsø Statsarkivet Norwegian Polar Institute Tromsø Polarmuseet.
10 August, Amsterdam (Netherlands): archive transfer De Nederlandsche Bank.

Haas, T.C.A. de

4-7 January, Sandbjerg (Denmark): Work meeting Džarylgač Survey Project.
1-7 April, Ann Arbor (USA): Roman Archaeology Conference (RAC).
10-16 May, Aarhus (Denmark): Work meeting Džarylgač Survey Project.
4-6 June, Leuven (Belgium): Roman crafts and trade (ROCT) network seminar.
30 October, Ezinge (Netherlands): Fransum Colloquium.
4-5 December, Leiden (Netherlands): Survey Workshop.
11 December, Groningen (Netherlands): Annual meeting GIA.

Hacquebord, L.

25 January, Den Haag (Netherlands): Television broadcast Buitenhof ‘De Smeltende ijskappen’, a special about the consequences of global warming in the polar areas.
28 January, Reykjavik (Iceland): IASC Meeting. Presentation Human and Social Sciences in IASC.
30 January, Reykjavik (Iceland): NATO-conference Security Prospects in the North.
5-6 March, Middelburg (Netherlands): Final congress International Polar Year.
11-13 March, Berlin (Germany): Congress German Ministry of Foreign Affairs.
23-27 March, Bergen (Norway): Arctic Science Summit Week, co-chair meeting.
21 April, Den Haag (Netherlands): Dinner with the Norwegian Ambassador E. Bugge.
23 April, Groningen (Netherlands): Presentation Arctic climate research of the Willem Barentsz Pool Institute to Queen Beatrix and the King and Queen of Sweden.
29-30 April, Tromsø (Norway): Ministers Meeting of the Arctic Countries with Al Gore (USA).
26 May, Groningen (Netherlands): Participation roundtable discussion on the consequences of climate change for the Waddensee after 2050, ‘Verdrinkt de Waddensee?’
27 May, Leiden (Netherlands): VSNU, presentation of a ‘A country of colourful variety. Samples of excellent academic research in the Netherlands’ (een staalkaart van Nederlands academisch onderzoek), including mentioning of the Arctic Centre research.
18-19 June, Sandefjord (Norway): 3rd Symposium on Whaling & History. Participation and lecture, on invitation.
22 June–5 July, Spitsbergen: Guide on a jubilee-trip Baluga to Spitsbergen, on invitation.
28 August–5 September, Spitsbergen: Trip to Spitsbergen with alumni of the University Groningen ‘Met de RUG naar Spitsbergen’, leader (with F. Steenhuisen).
10-13 September, Quebec (Canada): Meeting Ditchly Foundation, participation in discussion on the future of the Arctic Region, on invitation.
7 October, Zeist (Netherlands): Polar Meeting WNF, participation in discussion on the future of the Arctic Region, on invitation.
22-23 October, Groningen (Netherlands): WBPI Symposium ‘Sustainable Use of Resources in Polar Regions’, introduction of the symposium.
30 October, Den Haag (Netherlands): Workshop ‘Nederland en de Noordpool: kansen en verantwoordelijkheden’ at the Clingendael Institute, participation and lecture.
2-4 November, St. Petersburg (Russia): LASHIPA workshop, participation in discussion and two lectures.
9 December, Wassenaar (Netherlands): Dinner with the Canadian ambassador J. Wall.
10 December, Den Haag (Netherlands) Embassy of Canada, Round Table ‘The Canadian Arctic: Issues and Opportunities’, participation in discussion, on invitation. Keynote speaker Dr P. Harrison.

Holk, A.F.L. van

3 March, Wilhelmshaven (Germany): Cooperation with the Lower Saxony Institute for Historical Coastal Research.
11 December, Groningen (Netherlands): Annual meeting GIA, session leader.

Klein Goldewijk, G.M.

- 4-27 January, Jerusalem (Israel): collecting data at the Israel Antiquities Authority / Hebrew University, with assistance from Dr G. Avni of the Institute of Advanced Studies and Dr Y. Nagar, head of the Physical Anthropology Department of the Israel Antiquities Authority.
- 24 April, Utrecht (Netherlands): AIO conference Posthumus (economic history research school).
- 25 May–17 June, New York (USA): Workshop Economics for Ancient Historians, invited by Dr W. Harris of Columbia University who organised the workshop with Dr P. Temin of the Michigan Institute of Technology.

Kruse, F.

- 1-14 March, London (UK): Archival research at the National Archives and Royal Geographical Society.
- 26-27 March, Groningen (Netherlands): 18th Archaeology & Theory Symposium.
- 16-17 April, Amsterdam (Netherlands): Posthumus Training Programme 08/09. Minor Paper: Work in Progress.
- 24 April, Utrecht (Netherlands): Posthumus Training 08/09. PhD Conference.
- 12-15 June, Redruth (UK): 8th International Mining History Congress.
- 29 June—2 July, Lisbon (Portugal): 4th Summer School of the GLOBALEURONET. Posthumus Major Paper: Research Design Course.
- 17-22 August, Cambridge (UK): Archival research at the Scott Polar Research Institute.
- 7-11 September, Texel (Netherlands): 1st WBPI Writing Week.
- 22-23 October, Groningen (Netherlands): WBPI Symposium.
- 2-4 November, St. Petersburg (Russia): LASHIPA Conference.
- 27 November, Hilversum (Netherlands): Media day, VPRO/Net3.
- 7 December, Utrecht (Netherlands): Posthumus Training 08/09. Individual Assessment.

Leusen, P.M. van

- 11-17 January, Rome (Italy): RPC book meeting KNIR Rome (with P.A.J. Attema & G.J. Burgers).
- 29 January, Utrecht (Netherlands): NITG Utrecht (with P. Vos, J. Sevink & E. de Kleine).
- 4-5 March, Mol / Leuven (Belgium): RAGALIRS steering committee meeting.
- 24 April, Amsterdam (Netherlands): DECARS conference, Vrije Universiteit Amsterdam.
- 25-26 June, Amsterdam (Netherlands): Work on RPC book figures (with Brouwenstijn).
- 8 September, Amsterdam (Netherlands): T. Hengl (UvA) on geomorphometry.
- 15-18 September, Riva del Garda (Italy): EAA conference.
- 20-23 September, Florence (Italy): IGM and Florence University (Sarti, Pizziolo) to discuss HL conference proceedings.
- 30 October, Ezinge (Netherlands): Symposium on Italian Archaeology.
- 3 December, Den Haag (Netherlands): Study day Spatial Analyses in Archaeology (CAA-NL).
- 4 December, Leiden (Netherlands): Mediterranean survey workshop.

Loonen, M.J.J.E.

- 1-25 January, South Georgia, Falklands (Antarctica): Guide at a study trip.
- 3-5 February, Oslo (Norway): EU-FP7 proposal SIOS.
- 17 February, Utrecht (Netherlands): Student presentation end of master for K. Sisson.
- 22-23 March, Bergen (Norway): Ny-Aalesund Science Managers Committee Meeting.
- 5-9 May, Oslo (Norway): Svalbard Science Forum Terrestrial Flagship Meeting.
- 23-26 September, Vestmann Islands (Iceland): CAFF CBIRD working group.
- 9-14 October, Hölviken (Sweden): Goose Specialist Group.
- 22-23 October, Groningen (Netherlands): Willem Barentsz Polar Institute Symposium.
- 2-6 November, In Chuan (South Korea): Ny-Aalesund Science Managers Committee Meeting.
- 9-10 November, Beek en Dal (Netherlands): SOVON scientific advisory committee.
- 11 December, Groningen (Netherlands): Annual meeting GIA (morning session).
- 11 December, Groningen (Netherlands): Arctic Centre workshop Canada in High Arctic.

Nicolay, J.A.W.

- 2 March, Wargae (Netherlands): Excavation *terp*-site.
- 24 April, Leeuwarden (Netherlands): Symposium 'Het geheim van Tolsum'.
- 27 June, Aurich (Germany): Doktorandenkolloquium Ostfriesische Landschaft.
- 6-13. September, London and Kent (UK): Visit to several museums in South-east England.
- 9. October, Techum (Netherlands): Excavation *terp*-site.
- 17. October, Leeuwarden (Netherlands): Presentation publication *De wereld onder de Oldehove*.
- 9. November, Leiden (Netherlands): Visit to National Museum of Antiquities.
- 11 December, Groningen (Netherlands): Annual meeting GIA.

Nieuwhof, A.

- 26-27.March, Groningen (Netherlands): 18th Archaeology & Theory Symposium.
- 1.April, Wilhelmshaven (Germany): 12th International Scientific Wadden Sea Symposium.
- 24.April, Leeuwarden (Netherlands): Symposium 'Het geheim van Tolsum'.
- 27.June, Aurich (Germany): Doktorandenkolloquium Ostfriesische Landschaft.
- 2.July, Leeuwarden (Netherlands): Symposium on 'Integrale kennisagenda Waddenacademie'.
- 11.September, Huizinge (Netherlands): Symposium ARC 12,5 year jubilee.
- 19-23.September, Maastricht (Netherlands): International Sachsensymposium.
- 12.October, Techum (Netherlands): Excavation ARC bv.
- 5-7.November, Bremerhaven (Germany): Marschenratskolloquium.
- 29.November, Ezinge (Netherlands): Opening exhibition 'De Schatkisten van Museum Wierdenland'.
- 11.December, Groningen (Netherlands): Annual meeting GIA.
- 16.December, Amsterdam (Netherlands): Meeting researchers Early Middle Ages.

Overmeer, A.B.M.

- 27 February, Groningen (Netherlands): Meeting with J.W. Veluwenkamp, historian at the RUG.
- 20-23 April, Groningen (Netherlands): Computer course 'Publishing in Word'.
- 4 June, Amersfoort (Netherlands): Rijksdienst voor het Cultureel Erfgoed (RCE), MACHU Symposium.
- 11 June, Lelystad (Netherlands): RCE, presentation exhibition 'de Zeehond'.
- 22 and 25 June, Kuinre (Netherlands): Survey of shipwreck at lot R4, Noordoostpolder of the IFMAF International Fieldschool for Maritime Archaeology Flevoland.
- 23 June, Lelystad (Netherlands): Nieuw Land Erfgoedcentrum, presentation exhibition 'Vergane Schepen'.
- 10 August, Amersfoort (Netherlands): ADC bv, to advise on finds from Meppel, possibly re-used ship's timber.
- 30 August, Lelystad (Netherlands): Nieuw Land Erfgoedcentrum, information day for relations, presentation exhibition 'Vergane Schepen'.
- 5 October, Amsterdam (Netherlands): Excavation and raising of shipwreck Waterschip, found in Amsterdam Zeeburg, by ADC Maritiem.
- 12-16 October, Istanbul (Turkey): International Symposium for Boat- and Shiparchaeology (ISBSA).
- 10-11 November, Groningen (Netherlands): Computer course 'Endnote'.
- 13 November, Middelburg (Netherlands): Reuvensdagen Symposium (Dutch archaeological conference).

Prummel, W.

- 31.January, Leiden (Netherlands): Steentijddag (Stone Age Archaeology Day).
- 15.May, Enschede (Netherlands): Annual Vlaams-Nederlandse Ecologendag (Belgian-Dutch Ecological Archaeologists Day).
- 21.October, Den Haag (Netherlands): Course e-depot.
- 5.November, Amsterdam (Netherlands): 'De Anatomische Les', lecture given by Svante Pääbo on the neanderthal genomic.
- 27.November, Amersfoort (Netherlands): Archeozoolgy meeting on special finds: distinction and interpretation.
- 7.December, Athens (Greece): Conference 'Geosciences and Archaeology: Reading the archaeological landscape', organised by Universities of Athens and Patras, and the Netherlands Institute in Athens (NIA).
- 11 December, Groningen (Netherlands): Annual meeting GIA.

Raemaekers, D.C.M.

- 15 March, Assen (Netherlands): Drents Museum.
- 19 March, Nuis (Netherlands): Provincial depot soil finds.
- 23 March, Lelystad (Netherlands): Nieuw Land Erfgoedcentrum (W. van der Most, J. Habraken (province of Flevoland) & D. Velthuisen).
- 24 May, Achlum (Netherlands): Visit to excavation.
- 9 June, Amersfoort (Netherlands): Rijksdienst voor het Cultureel Erfgoed (RCE) concerning Odyssee programme.
- 10 November, Broeksterwoude (Netherlands): Visit to Th. ten Anscher.
- 11 November, Amersfoort (Netherlands): Visit to H. Huisman (RCE).
- 12-13 November, Middelburg (Netherlands): Reuvensdagen Symposium (Dutch archaeological conference).
- 27 November, Lelystad (Netherlands): Visit to D. Velthuisen concerning Schokkerhaven project.
- 30 November, Veldhoven (Netherlands): Site visit to Neolithic excavation (with S.M. Beckerman, J. Geuverink, G.R. Nobles, J.J. Wiersma & I. Woltinge).
- 11 December, Groningen (Netherlands): Annual meeting GIA, Opening and Presentation GIA publications.

Ratliff, M.L.

- 29 September, Groningen (Netherlands): Monthly Theory Group Meeting (led by O. van Nijf). Discussed publication A.W.-Hadriill's *Rome's Cultural Revolution* (2008).
- 1-3 October, Oxford (UK): Oxford Conference on Trade, Commerce, and the State in the Roman World, Oxford Roman Economy Project.
- 4-11 November, Tunisia: Research Assistant for a PhD colleague from the University of Leicester (UK) on his work on the Roman economy in North Africa.
- 2 December, Groningen (Netherlands): Monthly Theory Group Meeting (led by O. van Nijf). Discussed B. Olsen's article 'Material Culture after Text: Re-Membering Things' (2003) and R. Roth's *Styling Romanisation: Pottery and Society in Central Italy* (2007) (particularly Chapter 3).
- 11 December, Groningen (Netherlands): Annual meeting GIA.

Roura, R.M.

- 6-17 April, Baltimore (USA): 32nd Antarctic Treaty Consultative Meeting.
- 22 October, Groningen (Netherlands): Symposium 'Sustainable Use of Resources in Polar Regions'.
- 9-11 December, Wellington (New Zealand): Antarctic Treaty Meeting of Experts on ship-borne tourism.
- 12 December, Christchurch (New Zealand): Informal workshop of the (Antarctic) Committee for Environmental Protection Tourism Study 2009-2010.

Stapert, D.

- 10-14 August, München, Mauern and Neuburg (Germany): Staatssammlung München, study of archaeological collections. Several Middle Palaeolithic sites in the region were visited, especially the caves near Mauern. The Mauern collections exhibited in the museum in Neuburg were studied.

Steenhuisen, F.

- 2-4 June, Helsinki (Finland): AMAP Assessment Steering Group.

Terpstra, T.K.

- 26-27 January, Amsterdam (Netherlands): Amsterdam School for Social Science Research Conference: Citizenship, National Canons, and the Issue of Cultural Diversity. The Netherlands in International Perspective.
- 5-6 March, Middelburg (Netherlands): Netherlands Polar Symposium.
- 3 April, Utrecht (Netherlands): Network Day for Anthropologists.
- 9-12 June, Nuuk (Greenland): Meeting of the Sustainable Development Working Group of the Arctic Council.
- 7 September, Texel (Netherlands): 1st WBPI Writing Week.
- 2-5 October, Whitehorse (Canada): 9th ACUNS International Student Conference on Northern Studies and Polar Regions.
- 22 October, Groningen (Netherlands): Willem Barentsz Polar Institute Symposium.
- 23 October, Groningen (Netherlands): Netherlands Polar Network Day, held in conjunction with the

Willem Barentsz Polar Institute Symposium.

26 October, Leiden (Netherlands): Expert Meeting Canadian Inuit (National Museum of Ethnology).

28 October–1 November, Rovaniemi (Finland): BOREAS Final Conference: Histories from the North: environments, movements, narratives.

9-12 November, Copenhagen (Denmark): Meeting of the Sustainable Development Working Group of the Arctic Council.

11 December, Groningen (Netherlands): Science, shipping and geopolitics in the Canadian Arctic.

Voutsaki, S.

9 May, Rome (Italy): Meeting with colleagues from Exeter to prepare joint application for ESF Exploratory Workshop.

16 November, Los Angeles (USA): Meeting with colleagues from University of California and Stansted to prepare joint application for ESF Exploratory Workshop.

Willemsen, S.L.

21-23 October, Rome (Italy): Deliciae Fictiles IV (Terracotta conference).

Woltinge, I.

23 January, Almere (Netherlands): Meeting with municipal archaeologist Drs W.J. Hogestijn.

31 January, Leiden (Netherlands): Steentijddag (Stone Age Archaeology Day).

6 March, Leiden (Netherlands): Meeting with use wear specialists from the Faculty of Archaeology.

26-27 March, Groningen (Netherlands): Archaeology & Theory Symposium.

14 April, Amsterdam (Netherlands): INQUA-NL symposium.

27 June, Aurich (Germany): Doktorandenkolloquium.

13 November, Almere (Netherlands): Meeting with municipal archaeologist Drs W.J. Hogestijn.

1 December, Almere (Netherlands): Meeting with municipal archaeologist Drs W.J. Hogestijn.

3 December, Den Haag (Netherlands): Study day Spatial Analyses in Archaeology (CAA-NL).

11 December, Groningen (Netherlands): Annual meeting GIA.

3.4. WORKSHOPS AND EXHIBITIONS

- 1 January–31 December, Groningen (Netherlands): GIA Capita Selecta Lectures Series, organised by I. Woltinge. (Inter)national researchers are invited on a more or less monthly basis to give lectures on their research. These lectures are open to all students and staff of the GIA as well as other institutes and people from the field of archaeology.
- 1 January–31 December, Groningen (Netherlands): GIA Research Seminars, organised by P.M. van Leusen, S. Voutsaki, S. Arnoldussen & I. Woltinge. GIA's PhD and master students are invited monthly to give a short introduction to (a part of) their research and discuss this with other PhD students, master students and staff.
- 6 March, Middelburg (Netherlands): Poster presentation, organised by the Dutch International Polar Year Committee.
- 23-27 March, Bergen (Norway): Arctic Science Summit Week, organised by the International Arctic Science Committee.
- 26 March, Bergen (Norway): Arctic Science Summit Week, theme 7 'Risks to human health from a changing arctic', organised by M.J.J.E. Loonen.
- 26-27 March, Groningen (Netherlands): Archaeology & Theory Symposium, organised by S. Voutsaki, I. Woltinge, J. Thilderquist, B. Mater, S. Matthews & S. Arnoldussen.
- 26-27 March, Groningen (Netherlands): Archaeology & Theory Symposium, session 'Theorie & Veldwerk' organised by I. Woltinge.
- 27 March, Groningen (Netherlands): Archaeology & Theory Symposium, session 'Approaching Ritual in Archaeology', organised by A. Nieuwhof, J. Thilderqvist & M. Kok.
- 3-5 April, Ann Arbor, Michigan (USA): 8th Roman Archaeology Conference, organised by T. Wilmott, S. Alcock, P.A.J. Attema, S. Dyson, B. Hitchner, J. Humphrey, S. Keay, D. Mattingly & N. Terrenato. Session 5a Comparative Issues in the Archaeology of the Roman Rural Landscape, Site Classification between Survey, Excavation and Historical Categories, organised by P.A.J. Attema (GIA) & G. Schoerner (Friedrich Schiller Universität, Jena). Eight speakers from six countries (Belgium, Canada, England, Germany, the Netherlands, and South Africa).
- 5-9 May, Oslo (Norway): Workshop Svalbard Science Forum Terrestrial Flagship, organised by C. Hübner, G.W. Gabrielsen, S. Coulson & M. Loonen.
- 4-9 September, Iqaluit (Nunavut, Canada): Conference 'Out of the Cold: Scientific Ways of Knowing in Histories of the Circumpolar Arctic', organised by Histories from the North – environments, movements, narratives (BOREAS) and the European Science Foundation (ESF).
- 22 October, Groningen (Netherlands): WBPI Symposium 'Sustainable Use of Natural Resources in the Arctic', organised by L. Hacquebord & A.J.M. Scheepstra, in co-operation with the Norwegian Embassy in The Hague.
- 23 October, Groningen (Netherlands): Netherlands Polar Network Day 'Polar science in a political and historical context', organised by L. Hacquebord, M. Klunder, F. Kruse, I. Neve, A.J.M. Scheepstra & T.K. Terpstra. This day was held in conjunction with the Willem Barentsz Polar Institute Symposium.
- 30 October, Ezinge (Netherlands): Fransum Colloquium on 'Advances in the Archaeology of Latium vetus', organised by P.A.J. Attema at the occasion of the promotion of GIA PhD student L. Alessandri.

- 31 October—5 November, St. Petersburg (Russia): LASHIPA project conference ‘History of Resource Exploitation in Polar Areas’, organised by J. Laijus (European University of St. Petersburg).
- 7 November, Groningen (Netherlands): Excursion for members of the Drents Prehistorische Vereniging, organised by R.T.J. Cappers, A. Maurer, W. Prummel & R.J. Kusters.
- 16 November, Basel (Switzerland): University of Basel, Archaeology Seminar ‘Keramik und Kolonisation: die geometrische Keramik Euböas’, organised by M. Guggisberg (Archäologisches Seminar) & J.K. Jacobsen (GIA) within the framework of the International Francavilla Archaeological Project.
- 11 December, Groningen (Netherlands): GIA Research Day, organised by N.D. Maring-Van der Pers, J.A.W. Nicolay, P.M. van Leusen & R.T.J. Cappers.
- 11 December, Groningen (Netherlands): Workshop ‘Geopolitics in the Canadian Arctic’, organised by the Arctic Centre/Groningen Institute of Archaeology.
- 11 December, Groningen (Netherlands): Minisymposium ‘Science, shipping and geopolitics in the Canadian Arctic’, organised by L. Hacquebord & A.J.M. Scheepstra.
- 15-19 December, Pontinia (Italy): Communal Museum of Pontinia, organised by Comune di Pontinia.
- 16 December, Leeuwarden (Netherlands): Van Hall Institute, Symposium ‘De rijkdom van de Polen’, organised by L. Faber & M.J.J.E. Loonen.

3.5. VISITING SCHOLARS

Barr, S. (International Polar Heritage committee (Oslo, Norway)): Lecture Netherlands Polar Network Day, 'Polar science in a political and historical context'.

Bode, M. Dr (University of Amsterdam (Amsterdam, Netherlands)): Meeting editorial board e-journal of Indian Medicine.

Crouwel, J. Prof. (Emirius University of Amsterdam (Amsterdam, Netherlands)): Visit discussing chariots in pre-Roman Italy and Absolute Chronology.

Dodds, C. (University of London (London, UK)): Lecture Netherlands Polar Network Day, 'Polar Science in a political and historical context'.

Dorrepaal, E. (VU University (Amsterdam, Netherlands)): Lecture symposium 'Sustainable use of natural resources in the Arctic'.

Eles, P. von Dr (Inspector of the Soprintendenza Archeologica dell'Emilia Romagna (Italy)): presentation of two lectures at the Groningen Institute of Archaeology, consultation of database design, and exchange of excavation data.

Elzinga, A. (Göteborg Universitet (Sweden)): Attendance PhD defence of B.P. Abbink.

Flores, H. (Imares, Wageningen University (Wageningen, Netherlands)): Lecture symposium 'Sustainable use of natural resources in the Arctic'.

Greving, G. (Gasterra Groningen (Groningen, Netherlands)): Lecture symposium 'Sustainable use of natural resources in the Arctic'.

Harrison, P. (Queen's University (Kingston, Canada)): Lecture Symposium 'Science, shipping and geopolitics in the Canadian Arctic'.

Hauge, E.A. (Ministry of Petroleum and Energy (Oslo, Norway)): Lecture Symposium 'Sustainable use of natural resources in the Arctic'.

Hoiland-Nielsen, K. Dr (University of Aarhus (Århus, Danmark)): Working visit to discuss metal finds from the coastal area.

Houben, J.E.M. Prof. (École Pratique des Hautes Études): Meeting editorial board e-journal of Indian Medicine.

Jacobsen, J.K. Dr (associated post-doc researcher (GIA)): Planning of the 2009 excavations at Timpone della Motta (Italy) and paper on the 2008 GIA excavation on the Timpone della Motta.

Lammerts, L. (Ports and Waterways, DHV (Amersfoort, Netherlands)): Lecture symposium 'Science, shipping and geopolitics in the Canadian Arctic'.

Müller-Beck, H. Prof. (University of Tübingen (Tübingen, Germany)): Documentation of the Bohmers' excavations at Mauern and a lecture on the Middle/Upper Palaeolithic transition and the first peopling of the Americas.

Neef, R. Drs (Deutschen Archäologischen Instituts (Berlin, Germany)): Production of the Digital atlas of Economic Plants.

Pit, M. (International Arctic Science Committee (Potsdam, Germany)): Lecture Netherlands Polar Network Day 'Polar science in a political and historical context'.

Polet, G. (WWF Arctic Programme): Lecture symposium 'Sustainable use of natural resources in the Arctic'.

Skagestad, O.G. (Deputy Director of the Ministry of Foreign Affairs (Oslo, Norway)): Lecture symposium 'Sustainable use of natural resources in the Arctic'.

Smit, F. Dr (Danone Research): Meeting of editorial board of the e-journal of Indian Medicine.

Veen, M. van der Prof. (University of Leicester (Leicester, UK)): Use of reference collection.

Witcher, R. Dr (University of Durham, Department of Archaeology (UK)): Seminar on 'Villa's en boeren' and a guest lecture on demography in the Roman period.

3.6. EDITORSHIPS AND REPRESENTATION ON BOARDS AND COMMITTEES

Arnoldussen, S.

Editorial Board Journal of Archaeology in the Low Countries (www.jalc.nl)

Attema, P.A.J.

Head of the Department of Archaeology
Chairman of the GIA Advisory Board
Member of the GIA Management Team
Member of the Editorial Board *Palaeohistoria*
Member of the Editorial Board *Groningen Archaeological Studies* (GAS)
Member of the Advisory Board *Journal of Mediterranean Archaeology* (TMA)

Avango, D.

Chairman of the Board of the Swedish TICCIH section (The Swedish Industrial Heritage Association)
Chairman for 'The task force for Humanities, Social Science and Culture', within the framework of the Swedish Committee for the International Polar Year.
Chairman of the working group 'The Human- and Social Sciences in Polar Research', Polar forum, Swedish Polar Research Secretariat.
Member of the Executive Council of the Swedish IPY committee
Member of the Board TICCIH (The International Committee for the Preservation of Industrial Heritage)
Member of the Swedish SCAR Committee (Scientific Committee for Antarctic Research)

Bos, J.M.

Secretary of the Foundation for the Archaeology of the Middle Ages
Member of the Editorial Board *Groningen Archaeological Studies* (GAS)
Member of the constitutional board of editors of a new Belgian/Dutch periodical on Medieval Archaeology
Member of the Editorial board jubilee book AWFA

Cappers, R.T.J.

Member of the GIA Management Team
Member of the Board of the National Archaeological Research School ARCHON
Member of the Curatorium of the Netherlands Institute for the Near East (NINO)
Member of the Berenike Foundation
Member of the Groningen Roman Economy Group
Member of the Editorial Board *Groningen Archaeological Studies* (GAS)
Member of the Editorial Board *Electronic Journal of Indian medicine*
Member of the Editorial Board *Palarch*
Korrespondierendes Mitglied Deutsches Archäologisches Institut (DAI)

Galestin, M.C.

Member of the GIA Advisory Board

Groenendijk, H.A.

Member Editorial Board *Historisch Jaarboek Groningen*
Member Archäologische Kommission Niedersachsen
Member General Board Stichting Borg en Landgoed Verhildersum

Haas, T.C.A. de

Member of the PhD Council of the Research School ARCHON
Member of the Editorial Board *Journal of Mediterranean Archaeology* (TMA)

Hacquebord, L.

Director Willem Barentsz Polar Institute
Executive Secretary Willem Barentsz Foundation Groningen
Interim chair of the Science Standing Committee on Social System of IASC
Council member and delegate for the Netherlands in IASC
Leader of the IPY-LASHIPA project (www.LASHIPA.nl)
Co-chair of the International Symposium ASSW-2009 in Bergen (Norway)
Core member of the National Committee International Polar Year 2007-2008
Member of the GIA Management Team
Member of the Board of the Centre for Canadian Studies
Member of the International Polar Heritage Committee ICOMOS
Member of the Science Theme Committee of the IPY OSC in Oslo (Norway)
Member of the Interdepartmental Polar Research Committee, Ministries of BUZA, V&W, LNV, OCW, and VROM
Member of the Editorial Committee Circumpolar Studies
Member of the Editorial Board *Groningen Archaeological Studies* (GAS)
Member of the Editorial Board *Journal of the North Atlantic*

Holk, A.F.L. van

Member of the Glavimans Symposium Board
Member of the committee preparing the International Symposium on Boat and Ship Archaeology in 2012, 2015, 2018, and 2021

Kruse, F.

Member of the GIA Advisory Board
Member of the Netherland Polar Network (NLPN)

Leusen, P.M. van

Member of the GIA Advisory Board
Member of the Faculty of Arts Advisory Board on ICT

Loonen, M.J.J.E.

Chairman of the terrestrial research flagship for the Ny-Ålesund Science Plan
Netherlands representative Ny-Ålesund Science Managers Committee (NySMAC)
Netherlands representative for Conservation Arctic Flora and Fauna (CAFF)
Member of the Committee for Polar Research of NOW (CPO)
Member of the Willem Barentz Polar Institute
Member of the planning group for EU-FP7 project SIOS
Member of the Scientific Advisory Committee of SOVON bird research
Station leader Netherlands Arctic station
Treasurer and secretary Underwater Biology Foundation
Webmaster Netherlands Ornithological Union (www.nou.nu)
Webmaster international journal ARDEA (www.ardeajournal.nl)

Nieuwhof, A.

Secretary of the Vereniging voor Terpenonderzoek
Editor of the Annual Reports of the Vereniging voor Terpenonderzoek

Nijboer, A.J.

Member of the Department of Archaeology
Coordinator GIA Library

Overmeer, A.B.M.

Member of the projectteam 'Vergane Schepen', a new exhibition on maritime archaeology around shipwreck 'de Ventjager' (Nieuw Land Erfgoedcentrum)
Advisor of the exhibition 'Ridders, Rovers en Rouwdouwers', about the knights of Kuinre and the trade in the 13th and 14th century (Nieuw Land Erfgoedcentrum)
Advisor of students at Rijksdienst voor het Cultureel Erfgoed (RCE), researching the 16th-century shipwreck 'Scheurrak SO1'

Peeters, J.H.M.

Member of the Advisory Board UK Maritime and Marine Historic Environment Research Framework
Member of the Advisory Board Research Programme 'De Biografie van het Nieuwe Land' (CLUE / Free University Amsterdam (Prof. J. Kolen))
Member of the Scientific Advisory Board Dronten-N23 Excavation
Chief editor journal *Archeologie*

Prummel, W.

Member of the Faculty Board of the Faculty of Arts (until September 2009)
Member of the GIA Advisory Board
Member and chair of the jury W.A. van Es-award of Erfgoed Nederland (The Netherlands Institute for Heritage)
Member of the scientific committee of the National Reference Collection Bibliography Groningen
Member of the International Council for Archaeozoology (ICAZ)
Member of the Editorial Board *Groningen Archaeological Studies* (GAS)
Member of the Editorial Board *Palaeohistoria*
Member of the Editorial Board *Artes Letterenmagazine* (from September 2009)

Raemaekers, D.C.M.

Director of GIA
Member of the GIA Management Team
Secretary of the Department of Archaeology
Member of the Board of the National Research School ARCHON
Member of the NWO Committee Vrije Competitie Geesteswetenschappen
Member of the Advisory Board ARCHIS (Dutch Heritage Agency)
Member of the Advisory Board ADC Projecten
Member of the Advisory Board *Groningen Archaeological Studies* (GAS)
Editor GIA digital series *Grondsporen*

Stapert, D.

Member of the Editorial Board *Paleo-aktueel*

Terpstra, T.K.

Member of the Research Group Circumpolar Cultures
Member of the Netherlands Polar Network
Member of the Groningen Research Group on Migration and Culture
Representative for the Netherlands in the Sustainable Development Working Group of the Arctic Council

Voutsaki, S.

Secretary of the Board of the Archaeological Dialogues Foundation
Member of the Mid-Term Review Committee GIA
Member of the GIA Committee for Professor by special appointment 'Archeologie en Maatschappij'
Member of the Advisory Board *Archaeological Dialogues*
Member of the Advisory Board *Hesperia*
Member of the Editorial Board *Groningen Archaeological Studies* (GAS)
Member of Organizing Committee of the International Conference 'Subsistence, economy, and society in the Greek world improving the integration of archaeology and science'
Member of PhD Committee for Anthi Theodorou-Maurommatidi
Member of PhD Committee for Emmanouela Apostolaki

Willemsen, S.L.

Chief editor of the Editorial Board *Journal of Mediterranean Archaeology* (TMA)

Woltinge, I.

Member of the Externe Gebruikersgroep Archis

4. PHD PROJECTS

In September 2008 the Graduate School for the Humanities opened its doors for the first group of PhD students. The Graduate School provides a 20 ECTS training programme encompassing multidisciplinary and monodisciplinary courses. This last group of activities is carried out as part of the Posthumus Research School (PhD's Arctic archaeology) or in close cooperation with Research School ARCHON (all other PhD's).

4.1. CURRENT FUNDED PROJECTS (GIA, NWO)

Aalders, Y.I.

Exploitation of natural resources and cross cultural contacts of Russian Furhunters and European Whalers on Spitsbergen in the 18th century

Promotor: Prof. L. Hacquebord

Beckerman, S.M.

Ceramic analysis of Late Neolithic settlements in the province of Noord-Holland (The Netherlands) and interregional comparison

Promotor: Prof. D.C.M. Raemaekers

Co-promotor: Dr S. Arnoldussen

Gustafsson, U.I.

The exploitation of natural resources by the early 20th century whaling industry; its impact on the environment and the geo-political situation in the Polar Regions

Promotor: Prof. L. Hacquebord

Co-promotor: Dr D. Avango

Haas, H.R. de

The coal exploitation of the Dutch Spitsbergen Coal Company (NESPICO) Green Harbour in its national and international context

Promotor: Prof. L. Hacquebord

Co-promotor: J.W. Veluwenkamp

Haas, T.C.A. de

The Romanization of the Pontine region

Promotor: Prof. P.A.J. Attema

Co-promotor: Dr P.M. van Leusen

Klein Goldewijk, G.M.

Standard of living in the Roman Empire

Promotor: Prof. P.A.J. Attema

Co-promotors: Dr W.M. Jongman, Dr J.P.A.M. Jacobs

Kruse, F.

British exploration, mining and diplomacy on Spitsbergen, 1898-1952

Promotor: Prof. L. Hacquebord

Co-promotor: Dr D. Avango

Matthews, S.G.

Techniques and Society: A use-wear analysis of the metalwork from the Middle Bronze Age of North-western Europe

Promotor: Prof. D.C.M. Raemaekers

Co-promotor: Dr S. Hamilton, Dr S. Arnoldussen

Nieuwhof, A.

Ritual deposits in the northern Netherlands coastal area – Iron Age until Christianization

Promotors: Prof. D.C.M. Raemaekers, Prof. J. Bazelmans

Nobles, G.R.

Spatial analysis of Late Neolithic settlements in the province of Noord-Holland (The Netherlands) and interregional comparison

Promotor: Prof. D.C.M. Raemaekers

Co-promotor: Dr J.H.M. Peeters

Qi Hao

The origin of early agriculture at the middle and lower reaches of the yellow river

Promotors: Prof. D.C.M. Raemaekers, Prof. R.T.J. Cappers

Ratliff, M.L.

Roman consumption of bronze and iron: a case study of Pompeii, Herculaneum and the surrounding villas

Promotor: Prof. P.A.J. Attema

Co-promotor: Dr W.M. Jongman

Roura, R.M.

Polar cultural heritage: policies, management, and change in Spitsbergen and Antarctica

Promotor: Prof. L. Hacquebord

Schepers, M.

Coastal culture: a methodological palaeobotanical study on land use and landscape development in two distinct coastal areas

Promotors: Prof. D.C.M. Raemaekers, Prof. R.T.J. Cappers

Terpstra, T.K.

Transnational ties, urban networks and identity formation among Inuit migrants in Southern Canada and Denmark

Promotor: Prof. L. Hacquebord

Willemsen, S.L.

The Iron Age necropolis of the Latin site Crustumerium

Promotor: Prof. P.A.J. Attema

Co-promotor: Dr A.J. Nijboer

Woltinge, I.

What lies beneath? The value of buried Stone Age landscapes

Promotor: Prof. D.C.M. Raemaekers

4.2. CURRENT SELF FUNDED PROJECTS

Colelli, C.

A study of the impasto pottery from the Timpone della Motta di Francavilla Marittima (Calabria, Italy)
Promotor: Prof. P.A.J. Attema

Comis, S.

Het textiel van Spitsbergen
Promotor: Prof. L. Hacquebord

Drenth, E.

The Beaker Cultures in Northwest Europe
Promotor: Prof. D.C.M. Raemaekers

Elevelt, S.

Subsistence en sociale stratificatie in de Sibaritide in de periode Midden-Bronstijd – Vroege IJzertijd
Promotor: Prof. P.A.J. Attema

Haagsma, M.

Houses and Households in New Halos, Thessaly, Greece
Promotors: Prof. P.A.J. Attema, Prof. M. Kleibrink

Hijmans, S.

The iconography of the Roman Sun God, Sol
Promotors: Prof. P.A.J. Attema, Prof. M. Kleibrink

Ippolito, F.

Settlement dynamics in the hinterland of the Sibaritide (Calabria, Italy)
Promotor: Prof. P.A.J. Attema

Masci, M.F.

The production of Oinotrian geometric pottery in southern Italy (Calabria, Basilicata and Campania) during the Iron Age: a comparative study on technological aspects
Promotor: Prof. P.A.J. Attema
Co-promotor: Dr A.J. Nijboer

Oome, N.

Hellenistisch aardewerk en Hellenitische sites in de Sibaritide
Promotor: Prof. P.A.J. Attema

Tol, G.W.

The archaeological map of Nettuno; site classification and analysis of a local settlement system (700 BC – 500 AD) in a regional context
Promotor: Prof. P.A.J. Attema

Weistra, E.

Archaic terracotta votive offerings from the Athenaion in Francavilla Marittima (Calabria, Italy)
Promotors: Prof. P.A.J. Attema, Prof. M. Kleibrink

Wiersma, C.

Transitional periods in Bronze Age mainland Greece. A household perspective of the development of social differentiation of EH3 until LH1
Promotor: Prof. P.A.J. Attema
Co-promotor: Dr Voutsaki

4.3. CURRENT OTHER FUNDED PROJECTS

Devriendt, I.I.J.A.L.M.

Flint and other stone material from Swifterbant

Promotor: Prof. D.C.M. Raemaekers

Co-promotor: Dr J.H.M. Peeters

Feiken, H.

Geo-archaeological approaches to the hidden landscapes of Italy

Promotor: Prof. P.A.J. Attema

Co-promotor: Dr P.M. van Leusen

Grimm, J.

Silence of the Lambs. The keeping of animals and the use of animal products in medieval cities with special attention to the situation in Emden (Lower Saxony, Germany)

Promotor: Prof. H.R. Reinders

Co-promotor: Dr W. Prummel

Lindenhout, E. van 't

Architectuur in Archaisch Latium (Italië)

Promotor: Prof. P.A.J. Attema

Milka, E.

Mortuary differentiation and social structure in the Middle Helladic Argolid

Promotor: Prof. P.A.J. Attema

Co-promotor: Dr S. Voutsaki

Niekus, M.J.L.Th.

Stone Age Occupation of the northern Netherlands, Time, Space, Location and Subsistence

Promotor: Prof. D.C.M. Raemaekers

Overmeer, A.B.M.

Dutch clinker-built ships in the 15th and 16th centuries Prof. D.C.M. Raemaekers, Prof. H.R. Reinders & Dr

Promotor: A.F.L. van Holk

Satijn, O.

A socio-economic and political landscape archaeology of transition: southern Lazio from the Late Roman period to incastellamento

Promotor: Prof. P.A.J. Attema

Smit, B.

Valuable flints? Assessment and selection of stone age sites in the northern Netherlands

Promotor: Prof. D.C.M. Raemaekers, Prof. H.A. Groenendijk

Thilderqvist, J.G.M.

Ritual bones or common waste? A study of bone deposits in northwestern Europe

Promotor: Prof. D.C.M. Raemaekers

Co-promotor: Dr W. Prummel

4.4. PHD PROJECTS 2003-2009

This table lists GIA PhD students for the period 2003-2009.

EPS = Employed PhD student, RUG funded

DPB = Dutch PhD Bursary

UE = Ubbo Emmius bursary

B = Begin date, E = End date, D = Defence, S = Stopped

Name		2003	2004	2005	2006	2007	2008	2009
Aalders, Y.I.	EPS					1-8 B		
Abbink, B.P.	EPS		1-1 B			31-12 E		26-11 D
Alessandri, L.	UE				31-10 E			29-10 D
Bakker, R.	EPS	8-5 D						
Beckerman, S.M.	DPB							1-11 B
Dam, K.I.M. van	EPS				31-5 E		11-12 D	
Devriendt, I.I.J.A.L.M.	EPS		1-9 B				1-9 E	
Feiken, H.	EPS			1-9 B				
Gustafsson, U.I.	EPS					1-3 B		
Haas, H.R. de	EPS					1-4 B		
Haas, T.C.A. de	EPS			1-9 B				
Hekman, J.J.	EPS	15-5 D						
Joolen, E. van	EPS	12-6 D						
Karstkarel, N.	EPS		1-6 E	9-6 D				
Klein Goldewijk, G.M.	EPS					28-9 B		
Kruining, M.E. van	DPB							01-12 B
Kruse, F.	UE						1-6 B	
Matthews, S.G.	UE					1-9 B		
Milka, E.	EPS	1-11 B				31-10 E		
Mulder, S.A.	EPS		1-9 B	1-2 S				
Mulders, K.E.A.	EPS		31-5 E					
Niekus, M.J.L.Th.	EPS					28-2 E		
Nieuwhof, A.	EPS				1-4 B			31-3 E
Nobles, G.R.	EPS							1-11 B
Qi Hao	-							1-9 B
Ratliff, M.L.	UE					1-10 B (ICOG)		1-9 (GIA)
Roura, R.M.	UE			1-3 B				28-2 E
Satijn, O.	EPS				30-4 E			
Schepers, M.	DPB							1-9 B
Smit, B.I.	EPS		1-1 B			31-12 E		
Tensen, M.A.	EPS	16-8 B	15-8 E					
Terpstra, T.K.	EPS							1-1 B
Thildervqvist, J.G.M.	UE			1-9 B				31-8 E
Willemsen, S.L.	DPB						1-9 B	
Woltinge, I.	EPS				1-9 B			

4.5. PHD DEFENCES

3 September

PhD student: S.E. Hijmans

Promotor: Prof. P.A.J. Attema

Co-promotor: Prof. M. Kleibrink

Members of the board of examiners: Prof. J.N. Bremmer, Prof. E.M. Moormann, Prof. R.R. Nauta

29 October

PhD student: L. Alessandri

Promotor: Prof. P.A.J. Attema

Co-promotor: Prof. R. Peroni

Members of the board of examiners: Prof. M. Kleibrink, Prof. F. Vermeulen, Prof. A. Guidi

26 November

PhD student: B.P. Abbink

Promotor: Prof. L. Hacquebord

Co-promotor: Dr J.W. Veluwenkamp

Members of the board of examiners: Prof. A. Elzinga, Prof. D.F.J. Bosscher, Prof. H. Hoen

5. EMERITI AND OTHER RETIRED RESEARCHERS

Butler, J.J. (in cooperation with H. Steegstra)

Research activities

In 2009, Butler analyzed distribution patterns of bronze *Bombenkopfnadeln* and socketed knives in the Netherlands and (western) Europe. He identified, recorded and drew bronze objects for the Groninger Museum, the Fries Museum, the provincial archaeologist of Drenthe, and various metal detector users. He made study visits to the Nijmegen Museum and the Arnhem Museum and rerecorded the bronzes in their collections. He made contact with Dutch archaeologists about Dutch finds from the past, and with British, German and Belgian archaeologists. He also attended the annual excursion of the Bronze Age Studies Group and the Kroonlezing.

Kleibrink, M.

Research activities

Two guidebooks on the 'LAGARIA' Archaeological Park near Francavilla Marittima were completed, one in Italian and one in English, and mailed to native speakers for text correction. It is hoped that they will be printed in 2010, in time for the Park's official opening.

With L. Barresi, I worked on the publication of the protohistoric matt painted pottery (9th-8th C. BC) decorated in the 'Undulating Band Style' and with M. Fasanelli Masci on pottery decorated in the 'Crosshatching Band Style', both from my excavations at Francavilla Marittima 1991-2004 (drawings, photos, descriptions, etc.). I also helped these researchers with their other research projects: one with Prof. J. Bouzek at Prague University and one with Prof. P. Attema at Groningen University. Together with E. Weistra, I prepared a book on the iconography and cults of the Athenaion on the Timpone della Motta at Francavilla Marittima. This subject was also the theme of two lectures I gave in Italian: one entitled 'Pianificare lo spazio', presented in April at the Royal Dutch Institute in Rome, and one in November at Francavilla Marittima during the 'Giornate Archeologiche Francavillesi', an annual event hosted by the mayor of Francavilla Marittima. From the end of October till half December I worked in the Francavilla Marittima excavation storerooms in the Parco del Cavallo at Sibari.

Publications

Kleibrink, M., 2009. Indigenous Ware: Impasto, Undecorated, Matt-painted. In: F. van der Wielen-van Ommeren & L. De Lachenal. *Il Santuario ritrovato. Studi su i rinvenimenti dal Timpone della Motta di Francavilla Marittima, I.2-Ceramiche di importazione, di produzione coloniale e indigena, in BdA, Volume Speciale*. Roma, Istituto Svizzero, 171–207.

Kleibrink, M., 2009. La Dea e L'Eroe. Culti sull'Acropoli del Timpone della Motta, a Francavilla Marittima, presso l'antica Sybaris, VII Giornata Archeologica Francavillesi, Castrovillari, 1–22.

Kleibrink, M. & L. Barresi, 2009. On the 'Undulating Band Style' in Oinotrian Geometric Matt-Painted Pottery from the Weaving House on the Acropolis of the Timpone della Motta, Francavilla Marittima. In: M. Betelli, C. De Faveri & M. Osanna (eds.), *Prima delle Colonie. Organizzazione territoriale e produzione ceramiche specializzate in Basilicata e in Calabria settentrionale ionica nella prima età del ferro, Atti delle Giornate di studio, Matera 20-21 nov. 2007, 2008, 223–238*.

Wielen, F. van der-van Ommeren & M. Kleibrink, 2008 [2009]. Colonial Pottery. In: F. van der Wielen-van Ommeren & L. De Lachenal, *Il Santuario ritrovato. Studi su i rinvenimenti dal Timpone della Motta di Francavilla Marittima, I.2-Ceramiche di importazione, di produzione coloniale e indigena, in BdA, Volume Speciale*. Roma, Istituto Svizzero, 85–171.

Reinders, H.R.

Research activities

In 2009 Waterbolk and Reinders studied the habitation history of medieval Pesse (9th to the 13th centuries). The investigation also resulted in locating the medieval chapel of Bultinge, consecrated in 1335.

Publications

- Reinders, H.R., 2009. The Hellenistic City of New Halos, a Creation of Demetrios Poliorketes? In: *Proceedings of the 2nd Archaeological meeting of Thessaly and Central Greece (AETHSE)*. Volos, 369–379.
- Reinders, H.R. 2009. The Sailing Route from Uffelte to Utrecht. In: R. Bockius (ed.), *Between the seas, transfer and exchange in nautical archaeology*. Mainz, Verlag des Römisch-Germanischen Zentralmuseums, 337–348.
- Reinders, H.R., 2009. Παραλιακές πόλεις στον Παγασητικό και Μαλιακό κόλπο. *Όθρυς* 13, 73–122.
- Reinders, H.R., 2009. Τα νομίσματα της Άλου. *Όθρυς* 13, 153–173.
- Reinders, H.R. & Y. Aalders, 2008. Η μεσαιωνική πόλη του Αλμυρού και η ενδοχώρα της. *Όθρυς* 12, 11–28.
- Reinders, H.R. & H.T. Waterbolk, 2009. Archeologie en geschiedenis van Pesse. 1. De marke van Pesse en de opgravingen in het middeleeuwse oude centrum. *Nieuwe Drentse Volksalmanak* 126, 169–201.
- Reinders, H.R. & H.T. Waterbolk, 2009. Archeologie en geschiedenis van Pesse. 2. De middeleeuwse kapel van Bultinge. *Nieuwe Drentse Volksalmanak* 126, 203–213.
- Reinders, H.R., L. Karimali, W. Prummel, V. Rondiri, V. Tzevelekidi & M. Wijnen, 2009. The Neolithic Site of Kamára in the Sóurpi Plain (Thessaly, Greece). *Pharos* 15, 59–136.

Waterbolk, H.T.

Research activities

In 2009 I continued my studies on settlement excavations in the Drenthe village of Pesse, together with H.R. Reinders. This study resulted in two papers, of which the proofs were read. I prepared papers on the oldest houses in the *terpen* area and on the cultural landscape of early medieval Drenthe. At a symposium of the ‘Waddenacademie’ in Leeuwarden, I presented a lecture on the habitation in the *wadden* area before dykes were built. Afterwards, I was asked to publish an extended version. Together with J.J. Delvigne, I completed a paper on J.F. Steenhuis, A.E. van Giffen and the beginning of *terp* research. I began an active correspondence with the Danish physicist T. Andersen, who prepared a paper on the early history of radiocarbon dating in Europe.

Publications

- Waterbolk, H.T., 2009. *Getimmerd Verleden. Sporen van voor- en vroeghistorische houtbouw op de zand- en kleigronden tussen Eems en IJssel* (Groningen Archaeological Studies). Groningen, Barkhuis/Rijksuniversiteit Groningen.
- Kortekaas, G.L.G.A. & H.T. Waterbolk, 2009. Gebouwen uit de Romeinse tijd en de Volksverhuizingstijd in de stad Groningen. *Hervonden Stad* 2009, 105–114.

6. PUBLICITY

6.1. DOCUMENTATION

A considerable number of requests for the use of GIA images were dealt with in the first half of 2009. In the second half of the year, the focus was on designing and setting up a special GIA repository, in cooperation with the University of Groningen library. The purpose of this repository is to preserve relevant digital documentation from GIA excavations, which are carried out in accordance with KNA regulations.

6.2. PRESS

Arnoldussen, S.

15 June: *Regiokrant Beijum*, newspaper article 'Archeologie in Beijum'.

19 June: *Volkskrant/ANP*, newspaper article 'Jachtkamp van 9.000 jaar oud in Groningen gevonden'.

28 October: *Experiment NL. Wetenschap in Nederland (NWO/Quest)*, article 'Gesettelde boeren'.

Attema, P.A.J.

17 October: *NRC Handelsblad*, interview by T. Toebosch 'Scherven van de Zwarte Zee'.

Avango, D.

2 March: *Campi*, interview 'Polarexpedition synar valfångstindustri'.

6 March: *Website of Swedish Polar Research Secretariat*, LASHIPA 6 Field diary. Blog/fieldwork diary from the LASHIPAS 6 expedition to South Georgia at two websites: 1) Swedish Polar Research Secretariat (www.polar.se) and 2) LASHIPA website (www.lashipa.nl).

Haas, H.R. de

1 January: *Groninger studentenkrant*, interview on fieldwork Spitsbergen.

Haas, T.C.A. de

18 December: *Latina Oggi*, announcement of lecture on occasion of 75th anniversary of Pontinia.

Hacquebord, L.

25 January: *Buitenhof (Ned 1)*, 'De smeltende ijskappen'. Participation in discussion in a special on the consequences of global warming in the polar areas.

21 February: *Leeuwarder Courant, Sneon & Snein*, newspaper article 'Strijd om de ijsvrije Noordpool'.

22 February: *RTV Noord, Cunera op vrijdag*, interview on the end of the International Polar Year.

22 February: *VARA, Vroege vogels*, interview on the end of the International Polar Year, 'Geopolitiek en de bedreiging van het ecosysteem in de Arctische Oceaan'.

4 April: *Weekblad voor Fryslân, Sneinspectie*, article 'Territorium. Van wie is de Noordpool?'

1 June: *Meet the University of Groningen*, 'Louwrens Hacquebord. Professor of Arctic and Antarctic Studies'.

Holk, A.F.L. van

27 June: *Stentor*, interview 'Een gewoon schip dat is nog altijd bijzonder'.

30 June: *De Noordoostpolder*, interview 'Oorlogsschip is vrachtschip'.

1 July: *Flevopost*, interview 'In de oorlog zijn veel schepen verbrand'.

5 September: *Omroep Flevoland*, interview on the exhibition 'Vergane schepen'.

8 September: *NOS Journaal*, advice on a shipfind in IJmeer.

30 September: *SWZ Maritime*, interview by S. Klos on 'IFMAF'.

Jacobsen, J.K.

14 November: *Il Quotidiano*, interview by S. Negrelli: 'Un altro tempio a Francavilla'.

Kruse, F.

14 November: *TV programme 'Adams Appel'*, interview on 'Leegte'.

Loonen, M.J.J.E.

27 February: *NOS weblog North-Southpole and Radio 1*, 20 contributions, final one on 27 November 2009, read on Radio (see: <http://weblogs.nos.nl/noordzuidpool/category/Noordpool>).

6 March: *Radio Wereldroep*, interview on 'IPY – BIRDHEALTH'.

23 April: *Royal visit to University of Groningen*, presentation on the Netherlands Arctic Station/BIRDHEALTH.

21 June: *Radio 1, Vroege Vogels*, interview from Spitsbergen.

12 August: *Press release University of Groningen*, streetview: walking on Spitsbergen (see: <http://www.rug.nl/Corporate/nieuws/archief/archief2009/persberichten/117-09>). The press release generated articles on several internet news sites (e.g. nu.nl) and in newspapers like *Dagblad van het Noorden* and *De Groninger Gezinsbode*.

18 August: *Radio 1, Radio online*, interview about streetview by telephone from Spitsbergen.

22 August: *Radio 2, Cappuccino*, interview in Hilversum about streetview.

22 August: *Radio Haren FM*, interview about work on Spitsbergen.

2 September: *Radio 5, Teleac Hoe?Zo!*, interview on streetview and BIRDHEALTH.

15 November: *Website Royal Geographic Society*, webpage with video and recordings on Barnacle Geese. (see: http://www.discoveringthearctic.org.uk/4_long_haul_travel.html).

18 December: *Radio 3, Serious request*, advertisement cityoftalent.nl. The 'city of talent' is a new campaign to promote Groningen. The University is one of the partners and sponsors. I am representing the University with the slogan: "Ik ontdekte de Noordpool in Groningen".

4 December: *Norwegian television NRK*, program on arctic research and global warming: short footage. (see: <http://www1.nrk.no/nett-tv/klipp/582451>).

5 December: *Leeuwarder Courant*, opinion in 'Hard klimaatverdrag ver weg'.

Nicolay, J.A.W.

29 January: *Leeuwarder Courant*, newspaper article 'Archeologen leggen nog vier terpen bloot'.

20 February: *Leeuwarder Courant*, newspaper article 'Schatkamers uitgegraven'.

18 June: *Leeuwarder Courant*, newspaper article 'Graven naar Achlum aan Zee'.

18 June: *Omrop Fryslan* (radio and TV), interview on the excavation in Achlum.

19 June: *GPTV* (kabel TV), interview on the excavation in Achlum.

25 June: *Fries Dagblad*, newspaper article 'Verrassend weinig terp, maar wel veel archeologie'.

25 June: *Leeuwarder Courant*, interview 'Walviswervel in Achlumer terp'.

25 June: *BNN, radio 1*, interview 'Walviswervel in Achlumer terp'.

24 October: *Radio 1 news*, interview on a gold find in England.

Nieuwhof, A.

14 November: *'Ooit gebouwd voor altijd'* (40th anniversary book of the St. Groninger Kerken), interview on 'religion in prehistory'.

Prummel, W.

20 September: *VPRO (radio) programme 'Onvoltooid Verleden Tijd'*, interview 'Domesticatie eerste dieren'; part 2 of the series 'De lange weg naar Darwin' ('The long journey to Darwin') (see: <http://beagle.vpro.nl/#/audio/item/1927/>).

Raemaekers, D.C.M.

4 March: *Krant van Flevoland*, newspaper article 'Unieke vondst is doorbraak. Replica hakakker onthuld'.

1 August: *De Stentor*, eight newspaper articles on excavation in Swifterbant.

5 August: *Flevopost*, newspaper article on excavation in Swifterbant.

12 August: *Krant van Flevoland*, newspaper article on excavation in Swifterbant.

Terpstra, T.K.

15 June: *Huginn ok Muninn*, magazine article 'The Greenlandic Language in a nutshell'.

8. PUBLICATIONS

Number of scientific (sp) and professional (pp) publications

<i>Department</i>	<i>sp</i>	<i>pp</i>
Archaeology	55	41

8.1. SCIENTIFIC PAPERS

- Abbink, B.P., 2009. *Antarctic policymaking & science in the Netherlands, Belgium and Germany (1957-1990)*. PhD thesis, University of Groningen.
- Alessandri, L., 2009. *Il Lazio centro-meridionale nelle età del Bronzo e del Ferro*. PhD thesis, University of Groningen.
- Arnoldussen, S., 2009. Book review: C. Evans, D. MacKay & L. Webley, *Borderlands: the archaeology of the Addenbrooke's Environs, South Cambridge*. *Antiquity* 83 (322), 1204–1205.
- Attema, P.A.J., 2008. Conflict or Coexistence? Remarks on Indigenous Settlement and Greek Colonization in the Foothills and Hinterland of the Sibaritide (Northern Calabria, Italy). In: P. Guldager Bilde & J. Hjarl Petersen (eds.), *Meetings of Cultures, between Conflicts and Coexistence*. Aarhus, Aarhus University Press, 67–99.
- Attema, P.A.J., T.C.A. de Haas & G.W. Tol (eds.), 2009. *La carta archeologica di Nettuno: l'occupazione del territorio dalla preistoria al medioevo*. Pomezia (Roma), Arti Grafiche srl.
- Avango, D., 2009. Integrating the Human Dimension in IPY 2007–2009: Reflections on the Achievements in Sweden. *Journal of Northern Studies* 1, 115–127.
- Bazelmans, J., H.A. Groenendijk, G.J. De Langen, J.A.W. Nicolay & A. Nieuwhof, 2009. *De late prehistorie en protohistorie van Holoceen Noord-Nederland: onderzoeksagenda, versie 2.0*. Leeuwarden, Waddenacademie.
- Beckerman, S.M. & D.C.M. Raemaekers, 2009. Vormvariatie van Vlaardingen-aardewerk. Een nieuw typochronologie van het aardewerk van de Vlaardingegroep (ca. 3400-2500 v. Chr.). *Archeologie* 13, 63–82.
- Bos, I.J., H. Feiken, F. Bunnik & J. Schokker, 2009. Influence of organics and clastic lake fills on tributary channel processes in the distal Rhine–Meuse delta (The Netherlands). *Palaeogeography, Palaeoclimatology, Palaeoecology* 284 (3-4), 355–374.
- Brounen, F.T.S. & H. Peeters, 2009. Halffabrikaten van vroeg-neolithische dissels: enkele 'nieuwe' vondsten uit het Limburgse dekzandgebied, de losszone en het Maasdal. *Archeologie* 13, 5–16.
- Cappers, R.T.J., 2009. *Akkers in muren. De reconstructie van vroege akkerbouw in het Nabije Oosten*. Oratie, Leiden.
- Cappers, R.T.J., R. Neef & R.M. Bekker, 2009. *Digital Atlas of Economic Plants. Groningen Archaeological Studies* 9. Groningen, Barkhuis Publishing (1st ed.) (www.plantenatlas.eu).
- Colelli, 2009. C. Osservazioni preliminari sulle ceramiche d'impasto da Francavilla Marittima. In: G. Lena (ed.), *Ricerche archeologiche e storiche in Calabria - Modelli e Prospettive*. Cosenza, Editoriale progetto 2000, 43–58.
- Docter, R.F., F. Chelbi, B.M. Telmini, A.J. Nijboer, J. van der Plicht, W. van Neer, K. Mansel & S. Garsallah, 2008. New radiocarbon dates from Carthage: bridging the gap between history and archaeology? In: C. Sagona (ed.), *Beyond the Homeland: Markers in Phoenician Chronology*. *Ancient Near Eastern Studies Supplement Series* 28. Leuven, Peeters, 379–422.
- Drenth, E. & H.A. Groenendijk, 2009. Niederlande. In: O.M. Wilbertz (Hrsg.), *Langgräben und Schlüssellochgräben der jüngeren Bronze- und frühen Eisenzeit zwischen Aller und Dordogne* (Materialhefte zur Ur- und Frühgeschichte Niedersachsens 38). Rahden/Westf., Niedersächsisches Landesamt für Denkmalpflege, 181–229.
- Galestin, M. C., 2009. Frisians in the Roman Army. In: A. Morillo, N. Hanel & E. Martin (eds.), *LIMES XX*, Vol. 13 of *Anejos de Gladius*. Madrid, Ediciones Polifemo, 29–41.

- Hacquebord, L., 2009. Kopenhagen en de toekomst van het Noordpoolgebied. *Internationale Spectator* 63 (11), 562-565.
- Hacquebord, L. 2009. Resource Exploitation and Navigation in a Changing Arctic, *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* 69 (3) (Ook: *Heidelberg Journal of International Law*), 655-668.
- Hacquebord, L. 2009. Back to the Future. The Past, Present and Future of Resource Development in a Changing Arctic. *Journal of Northern Studies* 2, 7-21.
- Hacquebord, L. & D. Avango, 2009. Settlements in an Arctic Resource Frontier Region. *Arctic Anthropology* 46 (1-2), 25-39.
- Handberg, S., J.K. Jacobsen & G.P. Mittica, 2009. Recent Dutch and Danish Excavations at the Sanctuary of Timpone della Motta close to Francavilla Marittima, South Italy. In: T. Fischer-Hansen & B. Poulsen (eds.), *From Artemis to Diana. The Goddess of Man and Beast. Acta Hyperborea* 12, 554-558.
- Hijmans, S., 2009. *Sol. The sun in the art and religions of Rome*. PhD thesis, University of Groningen.
- Holk, A.F.L. van, 2009. De bakens verzet. Maritieme archeologie in Nederland in een stroomversnelling? *Tijdschrift voor Zeegeschiedenis* 28 (2), 12-23.
- Holk, A.F.L. van, 2009. Maritieme archeologie van de kogge. In: H. Brand & E. Knol (eds.), *Koggen, Kooplieden en Kantoren. De Hanze een praktisch network*. Hilversum, Verloren, (1st ed.) 123-143.
- Holk, A.F.L. van, 2009. Maritime archaeology in the Netherlands. Organisation, Scope and Development. In: C. Wei (ed.), *Proceedings International Symposium Penglai Ancient Ship*. Wuhan, Wuhan University of Technology, 304-320.
- Huisman, D.J., A.G. Jongmans & D.C.M. Raemaekers, 2009. Investigating Neolithic land use in Swifterbant (NL) using micromorphological techniques. *Catena* 78, 185-197.
- Jacobsen, J.K., G.P. Mittica & S. Handberg, 2009. Oinotrian-Euboean pottery in the Sibaritide. A preliminary report. In: M. Bettelli, C. De Faveri & M. Osanna (eds.), *Prima delle Colonie. Organizzazione territoriale e produzioni ceramiche specializzate in Basilicata e in Calabria settentrionale ionica nella prima età del ferro*. Venosa, Edizioni Osanna, 203-238.
- Kamermans, H., P.M. van Leusen & P. Verhagen (eds.), 2009. *Archaeological Prediction and Risk Management. Alternatives to Current Practice* 17. Leiden, Leiden University Press.
- Kamermans, H., P.M. van Leusen & P. Verhagen, 2009. Archaeological Prediction and Risk Management. In: H. Kamermans, P.M. van Leusen & P. Verhagen (eds.), *Archaeological Prediction and Risk Management. Alternatives to Current Practice* 17. Leiden, Leiden University Press, Chapter 1, 9-18.
- Kovatsi, L., D. Nikou, S. Triantaphyllou, S. N. Njau, S. Kouidou & S. Voutsaki, 2009. DNA repair enables sex identification in genetic material from human teeth. *Hippokratia* 13 (3), 165-168.
- Kuijper, D.P.J., R. Ubels & M.J.J.E. Loonen, 2009. Density-dependent switches in diet: a likely mechanism for negative feedbacks on goose population increase? *Polar Biology* 32, 1789-1803.
- Lantuit, H., V. Rachold, W. H. Pollard, F. Steenhuisen, R. Ødegård & H.-W. Hubberten, 2009. Towards a calculation of organic carbon release from erosion of Arctic coasts using non-fractal coastline datasets. *Marine Geology* 257, 1-10.
- Leusen, P.M. van, 2009. Archaeological Predictions Contested: the role of the Dutch Indicative Map of Archaeological Values (IKAW) in local planning procedures. In: H. Kamermans, P.M. van Leusen & P. Verhagen (eds.), *Archaeological Prediction and Risk Management. Alternatives to Current Practice* 17. Leiden, Leiden University Press, Chapter 6, 49-62.
- Leusen, P.M. van, A.R. Millard & B. Ducke, 2009. Dealing with uncertainty in archaeological prediction. In: H. Kamermans, P.M. van Leusen & P. Verhagen (eds.), *Archaeological Prediction and Risk Management. Alternatives to Current Practice*. Leiden, Leiden University Press, Chapter 9, 123-173.
- Liere, D.W. van, N.W.M. van Eekeren & M.J.J.E. Loonen, 2009. Feeding preferences in Greylag Geese and the effect of activated charcoal. *Journal of Wildlife Management* 73, 924-931
- Nicolay, J.A.W., 2009. Bürger Roms. Germanische Heimkehrer aus dem römischen Militärdienst. In: S. Burmeister & H. Derks (eds.), *2000 Jahre Varusschlacht - Konflikt*. Stuttgart, Konrad Theiss Verlag, 258-269.
- Nijboer, A.J., 2008. A Phoenician Family Tomb, Lekandi, Huelva and the tenth century BC in the Mediterranean. In: C. Sagona (ed.), *Beyond the Homeland: Markers in Phoenician Chronology*. Ancient Near Eastern Studies Supplement Series 28. Leuven, Peeters, 365-377.
- Nijboer, A.J., 2008. Italy and the Levant during the Late Bronze and Iron Age. In: C. Sagona (ed.), *Beyond the Homeland: Markers in Phoenician Chronology*. Near Eastern Studies Supplement Series 28 (1st ed.). Leuven, Peeters, 423-460.
- Nijboer, A.J., 2009. Archaeological contexts versus Greek centuries of darkness. In: A. Lehoërff (ed.),

- Construire le temps, Histoire et méthodes des chronologies et calendriers des derniers millénaires avant notre ère en Europe occidentale.* Glux-en-Glenne, 275–292.
- Pacyna, E.G., J.M. Pacyna, K. Sundseth, J. Munthe, K. Kindbom, S. Wilson, F. Steenhuisen & P. Maxson, 2009. Global emission of mercury to the atmosphere from anthropogenic sources in 2005 and projections to 2020. *Atmospheric Environment* 10, 1016.
- Peeters, H., 2009. 'Occupation continuity' and 'behavioural discontinuity': abrupt changes in forager land use at the Mid/Late Atlantic boundary in the Flevoland polders (the Netherlands). In: P. Crombé, M. Van Strydonck, J. Sergeant, M. Boudin & M. Bats (eds.), *Chronology and Evolution within the Mesolithic of North-West Europe*. Cambridge, Cambridge Scholars Publishing, 721–736.
- Peeters, H., 2009. Early Holocene landscape dynamics and forager land-use diversity: the example of Hoge Vaart-A27 (Almere, The Netherlands). In: S.B. McCartan, R. Schulting, G. Warren & P. Woodman (eds.), *Mesolithic Horizons. Papers presented at the Seventh International Conference on the Mesolithic in Europe, Belfast 2005*. Oxford, Oxbow, 269–276.
- Plicht, J. van der, H. J. Bruins & A.J. Nijboer, 2009. The Iron Age around the Mediterranean: a high chronology perspective from the Groningen Radiocarbon database. *Radiocarbon* 51 (1), 213–242.
- Prummel, W., D.C.M. Raemaekers, S.M. Beckerman, B.-M. Gillavry, R.T.J. Cappers, P. Cleveringa, I. Devriendt, H. de Wolf & J.T. Zeiler, 2009. Terug naar Swifterbant: een kleinschalige opgraving te Swifterbant-S2 (gemeente Dronten). *Archeologie* 13, 17–45.
- Prummel, W., M.J.L.Th. Niekus, W.A.B. van der Sanden, S. Arnoldussen & G. Aalbersberg, 2009. Bronstijdresten uit het Oude Diep. Archeologisch onderzoek op een beekdallocatie bij Hoogeveen. *Nieuwe Drentse Volksalmanak* 126, 125–160.
- Raemaekers, D.C.M. & M.J.L.Th. Niekus, 2009. Developments in Dutch Late Mesolithic: landscape, site location, subsistence and the introduction of pottery. In: P. Crombé, M. Van Strydonck, J. Sergeant, M. Boudin & M. Bats (eds.), *Chronology and Evolution within the Mesolithic of North-West Europe: Proceedings of an International Meeting, Brussels, May 30th-June 1st 2007*. Cambridge, Cambridge Scholars Publishing (1st ed.), Chapter 36, 737–753.
- Raemaekers, D.C.M., H.M. Molthof & E. Smits, 2009. The textbook 'dealing with death' from the Neolithic Swifterbant culture (5000-3400 BC), the Netherlands. *Berichte Römisch-Germanische Kommission* 88, 479–500.
- Reinders, H.R., L. Karimali, W. Prummel, V. Rondiri, V. Tzevelekidi & M. Wijnen, 2007 [2009]. The Neolithic site of Kamára in the Soúrpi Plain (Thessaly, Greece). *Pharos. Journal of the Netherlands Institute in Athens* 15, 59–136.
- Roura, R.M., 2009. The Polar Cultural Heritage as a Tourism Attraction. A Case Study of the Airship Mooring Mast at Ny-Ålesund, Svalbard. *Téoros* 28 (1) (special issue on polar tourism), 29–38.
- Verhagen, P., H. Kamermans & P.M. van Leusen, 2009. The Future of Archaeological Predictive Modelling. In: H. Kamermans, P.M. van Leusen & P. Verhagen (eds.), *Archaeological Prediction and Risk Management. Alternatives to Current Practice* 17. Leiden, Leiden University Press, Chapter 2, 19–25.
- Voutsaki, S., A. Ingvarsson-Sundström & M.P. Richards, 2009. Project on the Middle Helladic Argolid: a report on the 2007 season. *Pharos XV* (2007), 137–152.
- Voutsaki, S., A.J. Nijboer & C. Zerner, 2009. Middle Helladic Lerna: Relative and Absolute Chronologies. In: S.W. Manning & M.J. Bruce (eds.): *Tree-Rings, Kings and Old World Archaeology and Environment: Papers Presented in Honor of Peter Ian Kuniholm*. Oxford, Oxbow, 151–161.
- Voutsaki, S., K. Sarri, O. Dickinson, S. Triantaphyllou & E. Milka, 2009. The Argos 'Tumuli' Project: A report on the 2006 and 2007 seasons. *Pharos XV* (2007), 153–192.
- Woldring, H. & J. Zomer, 2009. De vestiging, ondergang en conservering van het laat-Boreale dennenbos van Roderwolde: een palynologische reconstructie. Met een samenvatting van het palynologisch onderzoek in de Polder Matsloot-Roderwolde. *Nieuwe Drentse Volksalmanak* 126, 107–124.
- Woldring, H. & J. Zomer, 2009. Houdbaarheid van hout; het laat-Boreale dennenbos van Roderwolde als case study voor de conservering van hout. *Grondboor & Hamer* 63, 103–109.

8.2. PROFESSIONAL PUBLICATIONS

- Aalbersberg, G., J. B. Hielkema & A. F. L. van Holk, 2009. *Aardgastransportleiding Grijpskerk – Wieringermeer, tracédeel Grijpskerk-Workum (A-652) catalogusnummer 52* (Gemeente Sneek, Archeologisch onderzoek: Inventariserend veldonderzoek (proefsleuven)). Raap-rapport 1853. Weesp, RAAP Archeologisch adviesbureau.
- Aalders Y., D. Avango, S. DePasqual, H.R. de Haas, L. Hacquebord, U. Gustafsson, C. Hartnell & F. Kruse, 2009. *Lashipa 5: Archaeological Expedition on Spitsbergen 27 July - 17 August*. Groningen, Arctic Centre/University of Groningen.
- Arnoldussen, S., J.-W. de Kort & Q.P.J. Bourgeois, 2009. A barrow for a camp-site? The disturbed barrow of Rhenen - Elsterberg (Unitas 4). *Lunula Archaeologia protohistorica* 17, 177–187.
- Attema, P.A.J., 2008. Survey in de Steppe, het Džarylgač Survey Project (DSP) (Noordwestelijke Krim, Oekraïne). *Tijdschrift voor Mediterrane Archeologie* 40 (20), 1–12.
- Attema, P.A.J., J. Delvigne, T.C.A. de Haas, W. de Neef, K. van der Veer & C. Williamson, 2009. Survey in de steppe: de tweede veldcampagne van het Džarylgač project 62. *Paleo-aktueel* 20, 62–68.
- Avango, D. & L. Hacquebord, 2009. LASHIPA 5 - the archaeology of natural resource exploitation and geo-politics on Svalbard. *Swedish Polar Research Secretariat Yearbook 2008*. A. Thoren. Stockholm, Polarforskningssekretariatet, 32–33.
- Cappers, R.T.J., 2009. Knoflook uit Sabi Abyad. *Nieuwsbrief FOSA* 4, 8.
- Cappers, R.T.J., R. Neef & R.M. Bekker, 2009. The Digital Plant Atlas: an international project. *Seed Testing International* 137, 8–11.
- Carmiggelt, A. & D. Stapert, 2009. De 'biografie' van de collectie Mauern (1937-1939). *Paleo-aktueel* 20, 9–16.
- Diepen, R. van, A.F.L. van Holk & A. Overmeer, 2009. *Vergane schepen* (achtergrondinformatie bij de vaste presentatie Vergane Schepen in Nieuw Land te Lelystad). Lelystad.
- Galestin, M.C., 2009. Het Romeinse schrijftafeltje uit Tolsum. *Paleo-aktueel* 20, 69–76.
- Geuverink, J., D.C.M. Raemaekers & I. Devriendt, 2009. Op zoek naar archeologie bij Doug's duin, Kamperhoekweg, Swifterbant, gemeente Dronten. Inventariserend veldonderzoek door middel van boringen (Grondsporen 4). Groningen, GIA (<http://archeologie.eldoc.ub.rug.nl/root/GS004/>).
- Groenendijk, H.A., 2009. Kroniek Cultureel Erfgoed 2008 (red). *Historisch Jaarboek Groningen*, 150–171.
- Haas, H.R. de, 2009. NV. Nederlandsche Spitsbergen Compagnie. The forgotten history of a Dutch coalmining company in the High Arctic. *Natural Resource* 12 (1), 26–28.
- Haas, T.C.A. de, 2009. Book review: J.L. Bintliff & P. Howard, *Testing the hinterland: the work of the Boeotia Survey (1989-1991) in the southern approaches of the city of Thespias*. *Tijdschrift voor Mediterrane Archeologie* 41, 55–57.
- Hacquebord, L, 2009. Polar Archaeology Network. In: V. Rachold & A. Sundin (ed.), *IASC 07/08 Bulletin*. Stockholm, IASC, 54–56.
- Hacquebord, L. 2009. L'exploitation des ressources naturelles en Arctique a toujours ete conduite jusqu'a l'epuisement des stocks - It is clear that the nature of man's exploitation of natural resources in the Arctic has always been exhaustive. In: *The Call of the Poles. 100 prominent people worldwide commit to saving the poles*. Paris, Le Cercle Polaire Publishing, 94–95.
- Hacquebord, L. 2009. Book review: C.I. Jackson (ed.), *The Arctic Whaling Journals of William Scoresby the Younger, vol. II, The Voyages of 1814, 1815 and 1816*. London, Hakluyt Society. *International Journal of Maritime History* 21 (2), 413–414.
- Holk, A.F.L. van, 2009. International Fieldschool for Maritime Archaeology. In: L. Bolle, R. van Diepen & W. van de Most (eds.), *WaterWerken. De tweede Deltacommissie*. Cultuurhistorisch Jaarboek voor Flevoland. Lelystad, Nieuw Land (1st ed.), 154–155.
- Holk, A.F.L. van, 2009. Scheepswrak gedetecteerd met geofysische technieken. *Paleo-aktueel* 20, 111–115.
- Holk, A.F.L. van & W.B. Waldus, 2009. Constructie. In: W.B. Waldus (ed.), *De Jonge Jacob*. ADC Monografie 6/ ADC rapport 2100 (1st ed.). Amersfoort, ADC Maritiem, 47–62.
- Johansen, L., M.J.L.T. Niekus & D. Stapert, 2009. Zwarte vuurstenen uit het Midden-Paleolithicum in Nederland. *Paleo-aktueel* 20, 1–8.

- Kruckenbergh, H., A. Kondratyev, J.H. Mooij, M.J.J.E. Loonen, J. Stahl & C. Zöckler, 2009. Antiprädationsverhalten von Weisswangengänsen auf Kolguyev und Svalbard. *Osnabrücker Naturwissenschaftliche Mitteilungen* 35, 59–68.
- Lagemaat, E. van de & I. Woltinge, 2009. Afgeronde vuurstenen Swifterbant (Fl.): vuurmakers of afgerond voor schachting? *Paleo-aktueel* 20, 38–42.
- Lanting, J.N., N.D. Maring-Van der Pers & D. Stapert, 2009. *Paleo-aktueel* 20.
- Lindhout, E. van 't, 2009. Book review: G. Cifani, *Architettura Romana Arcaica: Edilizia e società tra Monarchia e Repubblica*. *Tijdschrift voor Mediterrane Archeologie* 41, 58–59.
- Loonen M.J.J.E., 2009. PhD dissertation reviews: G. Eichhorn, *Travels in a changing world. Flexibility and constraints in migration and breeding of the barnacle goose*. *ARDEA* 97, 389–390.
- Nicolay, J.A.W., 2009. Graven aan de voet van de Achlumer kerk. *Van Wierden en Terpen* 12, 1.
- Niekus, M.J.L.T., J.R. Beuker, J.H. Aleid Bosch, L. Johansen & D. Stapert, 2009. Living on the edge. De Neanderthaler in Noord-Nederland. *Archeobrief* 13 (3), 25–36.
- Niekus, M.J.L.T., O. de Graaf, L. Johansen, J. Krist, D. Stapert & P. Vos, 2009. Neolithische vindplaatsen op de keilemrug Noordhorn-Zuidhorn (Gr.). *Paleo-aktueel* 20, 43–50.
- Overmeer, A.B.M., 2009. *Scheepswrak aan het Wrakkenpad. Waardstellend onderzoek aan scheepswrak B36, gemeente Noordoostpolder* (Grondsporen 5). Groningen, GIA (<http://archeologie.eldoc.ub.rug.nl/root/GS005/>).
- Peeters, H., P. Murphy & N. Flemming (eds.), 2009. *North Sea Prehistory Research and Management Framework (NSPRMF) 2009*. Amersfoort, Rijksdienst voor het Cultureel Erfgoed.
- Prummel, W., M.J.L.Th. Niekus, S. van der Meulen & R. Fens, 2009. Mesolithische botten uit het dal van de Tjonger (Fr.). *Paleo-Aktueel* 20, 25–31.
- Raemaekers, D.C.M. & J. Geuverink, 2009. Boren bij Doug's duin. Op zoek naar vindplaatsen bij Swifterbant (Fl.). *Paleo-aktueel* 20, 32–37.
- Raemaekers, D.C.M., 2009. Prospectief onderzoek retrospectief. Een evaluatie van het vooronderzoek van de vindplaats AHR39 in context. In: J. P. Flamman & E.A. Besselsen (eds.), *Het verleden boven water. Archeologische monumentenzorg in het AHR-project. Rapportage Archeologische Monumentenzorg 148*. Amersfoort, Rijksdienst voor Archeologie, Cultuurlandschap en Monumenten (1st ed.), Chapter 4, 97–103.
- Schokker, J. & H.A. Groenendijk, 2009. Een Scandinavische amulet uit Middag (Gr.). *Paleo-Aktueel* 20, 77–82.
- Stapert, D. & G.R. Boekschoten, 2009. Pincevent (Frankrijk) revisited: een winterhuis met haard. *Paleo-aktueel* 20, 17–24.
- Tol, G.W. & H. Feiken, 2009. Paesaggio, Cartografia Storica e topografia Antica. In: P.A.J. Attema, T.C.A. de Haas & G.W. Tol (eds.), *Nettuno. Il territorio dalla preistoria al medioevo*. Nettuno, Libreria Misteri, 25–36.
- Waldus, W.B. & A.F.L. van Holk, 2009. Uitrusting, inventaris en persoonlijke eigendommen. In: W.B. Waldus (ed.), *De Jonge Jacob*. ADC Monografie 6/ ADC rapport 2100. Amersfoort, ADC Maritiem (1st ed.), 95–114.
- Woldring, H. & P. de Boer, 2009. Neolithische boeren in het Groninger kustgebied. *Paleo-aktueel* 20, 51–57.
- Woltinge, I., 2009. *Almere Lage Vaart: op zoek naar de Oude Eem. Booronderzoek naar Oude Getijde Afzettingen aan de Trekweg en Kievitsweg in Almere, gemeente Almere* (Grondsporen 7). Groningen, GIA (<http://archeologie.eldoc.ub.rug.nl/root/GS006/>).