

PALAEOHISTORIA

*ACTA ET COMMUNICATIONES
INSTITUTI ARCHAEOLOGICI
UNIVERSITATIS GRONINGANAE*

45/46

2003/2004

Barkhuis Publishing
Groningen 2005

Editorial staff

P.A.J. Attema
M. Bierma
J.N. Lanting
M.A. Los-Weijns
N.D. Maring
A.J. Nijboer

Address

Groningen Institute of Archaeology
Poststraat 6
9712 ER Groningen
the Netherlands
gia@let.rug.nl

Website

www.palaeohistoria.nl

Publisher's address

Barkhuis Publishing
Zuurstukken 37
9761 KP Eelde
the Netherlands
info@barkhuis.nl
www.barkhuis.nl

ISSN 0552-9344
ISBN 9077922091

Copyright © 2005 Groningen Institute of Archaeology, Groningen, the Netherlands

All rights reserved. No part of this publication or the information contained herein may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, by photocopying, recording or otherwise, without prior written permission from the Groningen Institute of Archaeology.

Although all care is taken to ensure the integrity and quality of this publication and the information herein, no responsibility is assumed by the publishers nor the authors for any damage to property or persons as a result of operation or use of this publication and/or the information contained herein.

CONTENTS

R.T.J. CAPPERS & H. WOLDRING Sytze Bottema: an appreciation	1
G. ENTJES-NIEBORG & R.T.J. CAPPERS Bibliography of Sytze Bottema	3
D.C.M. RAEMAEEKERS An outline of Late Swifterbant pottery in the Noordoostpolder (province of Flevoland, the Netherlands) and the chronological development of the pottery of the Swifterbant culture	11
S. BOTTEMA, R.T.J. CAPPERS & A. KLOOSTERMAN The pollen signal of early neolithic farming along a habitation gradient in northern Drenthe	37
J.N. LANTING & A.L. BRINDLEY The destroyed <i>hunebed</i> O2 and the adjacent TRB flat cemetery at Mander (Gem. Tubbergen, province Overijssel)	59
J.N. BOTTEMA-MAC GILLAVRY Wood of the West House, Akrotiri, Santorini (Greece)	95
P.A.J. ATTEMA, T.C.A. DE HAAS & M. LA ROSA Sites of the Fogliano survey (Pontine region, Central Italy), site classification and a comment on the diagnostic artefacts from prehistory to the Roman period	121
J.J. BUTLER & HANNIE STEEGSTRA Bronze Age metal and amber in the Netherlands (III:2) Catalogue of the socketed axes, part B	197
P.M. VAN LEUSEN, T.C.A. DE HAAS, S. POMICINO & P.A.J. ATTEMA Protohistoric to Roman settlement on the Lepine margins near Ninfa (south Lazio, Italy)	301
W.A.B. VAN DER SANDEN Een vroeg-Romeins ruitergraf uit Zuidoost-Drenthe	347
W.A.B. VAN DER SANDEN Terug naar Fluitenberg – over een maliënkolder uit de ijzertijd	363

SYTZE BOTTEMA: AN APPRECIATION

R.T.J. CAPPERS & H. WOLDRING

Groningen Institute of Archaeology, Groningen, Netherlands

This volume of *Palaeohistoria* is dedicated to Professor Sytze Bottema, who worked at the palynological department of the Groningen Institute of Archaeology from 1963 until 2002 (previously, the Biological-Archaeological Institute, BAI). After finishing his studies in biology at the University of Groningen, Bottema accepted a job as a palynologist. His doctoral research dealt with the late Quaternary vegetation history of northwestern Greece and became a solid base for further palynological research in the Eastern Mediterranean and the Near East.

Partly in co-operation with Professor Van Zeist and Henk Woltring, Bottema worked on many corings, in particular originating from Greece, Cyprus, Turkey and Iran. Bottema broke new ground in publishing on the vegetation history of these areas and his publications are still a firm foundation for the interpretation of climatic change, human impact on the former vegetation and the modelling of the origin and spread of agriculture.

Bottema's palynological research is characterised by his interest in methodological aspects. Extensive effort has been given to the correlation of present pollen precipitation and standing vegetation as a tool for the reconstruction of former vegetation types. Several studies have concentrated on anthropogenic indicators in the pollen records of the Near East, including those of cereals and trees with edible fruits, and particular emphasis has been given to the Late-Glacial and Holocene subdivision of the Near East.

His keen observations on vegetation and agricultural practices, including those from several archaeological experiments, have contributed to the interpretation of subfossil macroremains. As one example, he participated in agricultural experiments to determine the possibilities of crop cultivation in an unprotected salt marsh. Other subjects of his research have been sampling strategies and the taphonomic processes that acted on ancient food plants, and he carried out important field work in Gomolava (Serbia), Niederwil (Switzerland) and Tell Hammam et-Turkman (Syria).

In addition to his research in the Eastern Mediterranean and the Near East, Bottema also worked on pollen cores from western Europe, in particular those from the northern Netherlands. Realising that current nature management could profit from knowl-



edge of the vegetation history of the Netherlands, he contributed both by publishing on this subject and by accepting a position on the board of the Milieuraad Drenthe and Het Drentse Landschap.

Bottema's excellent knowledge of the palaeoclimates and palaeoenvironments of the Eastern Mediterranean and Near East was rewarded by an extraordinary professorship at Leiden University in 1993 and at the University of Groningen in 1994. From 1995 onwards, Bottema was a visiting professor at Leuven University, where he taught environmental archaeology of the Eastern Mediterranean, based on Palaeobotany. In 1998, Bottema received a royal decoration (Knight of the Order of Orange-Nassau) for his contributions to science.

Although predominantly related to palynology, his scientific research has also engaged with animal life. In a movie made by Bottema during an early BAI coring expedition in Southwest Turkey in May-June 1977

– now a historical document of our institute – scenes recording the taking of cores and documenting the surrounding vegetation are frequently alternated with shots of the activities of birds. From childhood onwards, Bottema has kept animals, with a special interest in birds, and still keeps several species of geese and ducks in his large garden. Owing to his keen interest in the domestication process of animals and his sympathy with endangered domesticated animals, Bottema co-founded the Foundation of Rare Breeds (Stichting Zeldzame Huisdierrassen) in 1976. In 1978, together with Professor Clason, he bought the last pure-blooded Groningen horse stallion (Baldewijn), which was on its way to the butcher. Thanks to his action, this unique breed has been secured for the future.

Bottema's observations and studies of animals are documented in publications, the number of which kept pace with those on palynology. They include

monographs on species of Dutch sheep and on the lapwing (*Vanellus vanellus*), the latter only published in a limited edition. Occasionally, it was also possible for Bottema to study subfossil animal remains, such as the eggs from early Sneek. The large number of publications, therefore, also includes those dealing with animals.

It was an unpleasant discovery that, shortly before his retirement, there were the first signs of Multiple System Atrophy and, although this setback had almost no influence on his good mood, it became increasingly difficult for him to continue his palynological research. A major article on the pollen signal of early Neolithic farming along a habitation gradient in northern Drenthe (the Netherlands) has recently been completed and, although it is unusual in a special volume dedicated to a colleague, we feel honoured to include it in this book.