

## PREFACE

Hundreds of boreholes were made in the southwestern part of The Netherlands during the last century. Many of these were for the exploration of oil and gas and passed through Holocene and Pleistocene strata without detailed attention being paid to these superficial deposits. Others were made to obtain drinking water, had a purely scientific purpose, or were made in relation to water defense works.

A well-known, and also one of the oldest boreholes on the island of Voorne-Putten, is the one made in the centre of the city of Brielle in 1903, in search for drinking-water. That borehole was as deep as 90 m. It was described and investigated by the geologist Lori. Another well-known borehole, also located in Brielle, yielded important data for the tuning of Early Pleistocene chronostratigraphy and mammal-biozonation. In this volume frequent references are made to these boreholes.

The results of such studies made clear that the Pleistocene sequence in the SW Netherlands is not yet fully understood.

Mr L. W. Hordijk, an inhabitant of the city of Brielle, has been investigating the Holocene and Pleistocene sequence in the surroundings of his residence since a number of years. He started with primitive methods, but since he acquired a bailer-drilling equipment, he made, fully by hand, a borehole ("Zuurland-1"), down to a depth of over 95 metres. He started studying the lithology and the larger fossils in the ground below his feet, and then came into contact with his fellow citizen Mr A. C. Janse, a member of the society "Werkgroep voor Tertiaire en Kwartaire Geologie" ("Working Group for Tertiary and Quaternary Geology"). After that, contacts were made with other researchers who were very much interested in the material brought to the surface. Much of the finer fractions of the samples, containing information on the fossil fauna and flora, however, had been lost during sieving. Therefore, Hordijk started a second borehole, "Zuurland-2", close to the first one.

The samples from this second borehole are now being studied by researchers of different disciplines. Preliminary results of their studies were presented in November 1986 during a symposium jointly organized by the "Werkgroep voor Tertiaire en Kwartaire Geologie" and the "Werkgroep Pleistocene Zoogdieren" ("Working Group on Pleistocene Mammals"). On that occasion Mr Hordijk was granted the "P. van der Lijn onderscheiding", an award given to non-professional geologists, who made important contributions to the geology of The Netherlands.

The papers presented in this issue are extended versions of the lectures presented during the above meeting, and report about the lithological, faunal and floral characteristics of borehole "Zuurland-2".

It is not pretended to present here definite answers to the many questions related to the Quaternary history of the area. Rather it is a report of the state of affairs. It also offers an insight into the many problems which are inherent to joined studies by different disciplines.

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T. van Kolschoten,  
P. L. de Boer  
(editors)