## Bert Boekschoten: a biographical sketch

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#### An encounter with geology

In 1942, close to his home in Hilversum, Bert Boekschoten for the first time found a fossil: a piece of flint with bryozoans. His uncle, who was an enthusiastic amateur collector, put him in touch with the well-known Dutch collector Van der Lijn to explain what he had found; thus, Bert's interest in paleontology was born.

He started collecting himself; as a young boy he used to cycle to Winterswijk, in the eastern part of the Netherlands, which is quite a distance from Hilversum, to collect fossils in the Miocene outcrops. Because his interest in geology and paleontology went further than merely collecting, he took up a study in geology at Utrecht University in 1952. Among his teachers were the eminent paleontologist Prof. Von Koenigswald, a specialist in fossil hominids, and micropaleontologist prof. Drooger. During the first years of his study, Bert astonished his fellow students with his almost encyclopedic knowledge of fossils; one of the things that later on made his classes and excursions a special experience. As a student he began to develop his wide interest in many aspects of paleontology. Being originally interested in invertebrates and molluscs in particular, Bert published several papers on molluses from Dutch deposits, the first in 1954 (no. 1 in the bibliography at the end of the present contribution), when he was in the second year of his study.

In 1959, he moved to Groningen University, to work at the Geological Institute led by the famous Dutch geologist Prof. Kuenen and later by Prof. Van Straaten. Teaching paleontology to geological and biological students was his main task in this small institute.

#### Wide interests

Bert's research in Groningen was devoted to forams, but his wide interests made him explore more aspects of paleontology and geology. Besides work on molluscs from several localities throughout the Netherlands and Europe [6, 8, 18, 19, 30, 34], he was one of the first, together with Dr Paul Sondaar, to study the small elephants, rhinos and deer and the giant mice of Crete, Cyprus and the Balearics and the phenomenon of dwarfism of large animals and gigantism of small species, which is typical of island faunas [15, 20, 31]. He also published on the geology of Crete [4, 7, 9, 26, 36].

Bert also maintained his interest in the geology and paleontology of the Netherlands. He wrote on several aspects of Tertiairy and Quaternary geology and paleontology [12, 17, 24] and published an updated version of P.J. van der Lijn's *Keienboek* [32] in 1973; this book still serves as a collector's guide to erratics from the Netherlands. In the meantime he continued working on forams, and in 1969 he published his PhD thesis on the Foraminifera from a boring in northern Germany [23].

A special field of interest was actuopaleontology: the study of recent biological phenomena, together with their fossil counterparts, in order to get a better understanding of the fossil record. In this line, Bert began to study ichnofossils, traces of organisms that were left on and in the substrate that these organisms lived on or in. In 1966 and 1967, he published some influential papers on traces that were left on shells by recent organisms and, in the light of this study, similar fossil traces [14, 18]. He would stay involved in trace-fossil research much longer [25, 37, 51]. As an actuopaleontologist he expanded his field into the study of reefs and corals. He joined several expeditions to Indonesia (the Snellius II and post Snellius II



Figure 1. Bert Boekschoten during a field excursion in 1975. Courtesy of Mr Herman Sips.

expedition), the CAN CAP expeditions of the Natural History Museum in Leiden to the Atlantic Ocean, and an expedition to the Seychelles to study recent coral reefs and to integrate his findings with research on fossil material (papers on fossil and recent corals and reefs; [39 and onwards]). In 1988 Bert, together with two colleagues, published the discovery, near Grythyttan in Sweden, of stromatolite structures that represent the oldest traces of life in Europe [56].

Besides paleontology, Bert Boekschoten is interested in aspects of archeology, which resulted in a publication [5] on an archeological investigation on Crete. In his later career, he acted at several occasions as supervisor for PhD students at the Archeological Institute of Groningen University. He was at the time involved in research in archaeozoology, a.o. on mites, fish remains and mammal remains from archeological sites. The main supervision of this research was done by Dr A. Clason of the Archeological Institute.

### **Teaching career**

In 1967, Bert Boekschoten was appointed *privaat docent* (unsalaried university lecturer) in paleontology at the Groningen University. In 1974, he became *lector* (lecturer) in paleontology [35], in which position he

organized many excursions and fieldworks, which were very popular among his students (Figure 1). In 1980 this position was upgraded to a professorship. He was a supervisor of PhD research on a variety of subjects, such as the study of whelk shells from the North Sea, paleobiology of favositid corals, biology of globiginerid foraminifers and its paleobiologic implications, the reefs of Curaçao and Bonaire and the phylogeny of Mesozoic fishes. At present, he is a supervisor of several PhD studies on a variety of paleontological subjects and is involved in the study of mesozoic vertebrates.

Bert stayed at Groningen University till 1986, when the Geological Institute, due to a reorganisation of the study of geology in the Netherlands, was forced to close its doors. This was also the unfortunate end of the small, successful, and – among students of biology, popular – paleontological department and an illustration of the difficult position of paleontology at Dutch universities. He kept his position as professor of paleontology at Groningen University, however, for one day a week. He continued his work with the Marine Geology Group at the Institute of Earth Sciences of the Vrije Universiteit in Amsterdam. There he was mainly involved in teaching paleontology for undergraduate and graduate students. At the time of his retirement, he was the last professor of general paleontology in the



Figure 2. Bert Boekschoten during a field excursion in 1999. Courtesy of Mr Jan Delvigne.

Netherlands; now, after his retirement, there is no chair in general paleontology in the Netherlands anymore.

Among students, Bert is well-known for his lively lectures and practical instruction, illustrated with beautiful slides and sometimes hilarious anecdotes from the field of paleontology. Bert always shows an infectuous enthusiasm for paleontology and he is a master in transferring his enthusiasm to his students. He sees himself as someone who has to show how beautiful fossils and paleontology are and who has to teach how important they are to understand not only the history of life on earth but also the processes that are still going on. He wants to give his students the opportunity to work with fossils and he is always able to invent original subjects and problems to study. From his students he expects enthusiasm, dedication and originality and the ability to carry out research independently. His field excursions throughout Europe were always very popular among students, not in the least because Bert loves to combine the pleasure of

paleontology by day with the pleasure of good food and wine and cultural events by night.

#### Communicating earth sciences

Bert was, until 1999, a long serving member of the editorial board of the Dutch geological journal Geologie en Mijnbouw. He was one of the initiators of Biochron, a permanent exposition on earth science and paleontology in Emmen Zoo. He is not only active among professionals in the field of paleontology but is also well-known among Dutch amateur paleontologists [65]. Bert is always willing to make his knowledge and expertise available to others. He has been a long-term member of the advisory board of Grondboor & Hamer, the journal of the Nederlandse Geologische Vereniging (the society for Dutch amateur geologists and paleontologists). He regularly published popular accounts on geological and paleontological matters in Grondboor & Hamer and is always helpful when people need his advice on paleontological questions.

Although Bert Boekschoten has retired, he remains active in paleontology (Figure 2). He is still teaching and involved in research and several PhD students are working under his supervision. Dutch paleontology will continue to benefit from his enthusiasm and originality.

# Bibliography of Bert Boekschoten (book reviews not included)

- 1. 1954 De Midden-Oligocene mollusken van Winterswijk Amoeba 30 (12): 175–181
- 1957 Lavendelblauwe verkiezelingen op Gotland Grondboor & Hamer 11: 74–76
- 1962 Van en uit het Geologisch Museum te Groningen Grondboor & Hamer 16: 77–82
- 4. 1962 Beachrock at Chersonisos Geologie en Mijnbouw 41: 3–7
- 1962 Note on Roman purple winning at Chersonisos, Crete Basteria 26: 59–60
- 1963 Vondsten en verwachtingen van het Oligoceen van Oost-Nederland – Grondboor & Hamer 17 (3): 90–95
- 7. 1963 Some geological observations on the coast of Crete Geologie en Mijnbouw 42: 241–247
- 1963 Paleoecological notes on the septaria clay (Oligocene) of the eastern Netherlands – Proceedings Koninklijke Nederlandse Akademie van Wetenschappen B 66 (5): 280–295
- 1963 On Cretan flysch and its igneous rocks Praktika 38: 308– 312
- 10. 1964 Een steen met boorgaten Grondboor & Hamer 18: 40–43
- 11. 1964 Tadpole structures again J. Sedimentary Petrology 34: 422–423

- 12. 1965 Over de verspreiding van mammoetfossielen in noordelijk Nederland – Geologie en Mijnbouw 44: 295–297
- 13. 1966 (with H.J. Veenstra). Aantekeningen bij zwerfsteentellingen Grondboor & Hamer 20: 207–209
- 14. 1966 Shell borings of sessile epibiontic organisms as palaeoecological guides (with examples from the Dutch Coast) – Palaeogeography Palaeoclimatology Palaeoecology 2: 333–379
- 15. 1966 (with P.Y. Sondaar). The Pleistocene of the Katharo Basin (Crete) and its Hippopotamus – Bijdragen tot de Dierkunde 36: 17–44
- 16. 1966 Une faune des sables à Pycnodonte callifera sous l'argile rupélienne à Sint Niklaas-Waas (Belgique) – Bulletin de la Société belge de Géologie, de Paléontologie et d'Hydrologie 75: 141–146
- 17. 1967 (with H.J. Veenstra). Over stenen-oriëntatie in het Nederlands keileem Geologie en Mijnbouw 46: 195–205
- 1967 Palaeoecology of some Mollusca from the Tielrode sands (Pliocene, Belgium) – Palaeogeography Palaeoclimatology Palaeoecology 3: 311–362
- 1967 Eine Fauna aus dem Glaukonitsand von Ootmarsum (Miozän, Niederlande) – Natuurhistorisch Maandblad 56: 39–48
- 20. 1967 (with P.Y. Sondaar). Quaternary mammals in the South Aegean island arc, with notes on other fossil mammals from the coastal regions of the Mediterranean – Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen B 70 (5): 556–576
- 1968 Een vondst van Cervus elaphus, het edelhert, op Vlieland
   Grondboor & Hamer 22: 139
- 1969 Ein neuer Fund eines Limulinen aus dem Osnabrücker Karbon – Publicaties Natuurhistorisch Genootschap Limburg 18: 16
- 23. 1969 Fossilführung und Stratigraphie des Oligo-Miozäns von fünf norddeutschen Bohrungen Meyniana 19
- 24. 1969 Foraminiferen uit het Mioceen van Winterswijk, Miste Mededelingen van de Werkgroep voor Tertiaire en Kwartaire Geologie 6: 27–30
- 1970 On bryozoan borings from the Danian at Fakse, Denmark.
   In: Crimes, T.P. & J.C. Harper (eds) Trace fossils Geological
   J., Special Issues 3 (Sealhouse Press, Liverpool): 43–48
- 26. 1971 Quaternary tephra on Crete and the eruption of the Santorin volcano. In: Strid, A. (ed.) Evolution in the Aegean Opera Botanica 30: 40–48
- 27. 1971 Über Cölestin im Dogger von Sarstedt Berichte Naturforschung Gesellschaft Hannover 115: 11–13
- 1971 (with M.H. Huizinga). Over componenten van locale herkomst in Noord-Nederlandse preglaciale zanden – Grondboor & Hamer 25: 40–44
- 1972 Nogmaals: Rhombenporfierdiabaas Grondboor & Hamer 26: 19–20
- 30. 1972 Über einige Molluskenfunde im Wellenkalk von Winterswijk (Niederlande) Geologie en Mijnbouw 52: 574–575
- 31. 1972 (with P.Y. Sondaar). On the fossil Mammalia of Cyprus I/II Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen B 75 (4): 306–338
- 32. 1973 Het keienboek W.J. Thieme, Zutphen (update and reworking of the original text by P.J. van der Lijn)
- 33. 1975 (with P. Buurman & Y. Koster). Allophane and its initial crystallization products as concretions in the South Limburg chalk Geologie en Mijnbouw 54: 36–42
- 34. 1975 Ueber einige Molluskenfunde im Wellenkalk von Winterswijk (Niederlande) Geologie en Mijnbouw 52: 574–575
- 1977 Luctor et emergo. Een episode uit het Devoon (Openbare les) – Wolters Noordhoff, Groningen

- 36. 1978 (with E. Georgiades-Dikeoulia). Une dolomie fossilifère neogène à Sission (à l'est de Heraklion, Crète) – Annales de Géologie des Pays Hellenique 28: 54–61
- 37. 1980 (with P.J.W. Jüch). Trace fossils and grazing traces produced by *Littorina* and *Lepidochitona*, Dutch Wadden Sea Geologie en Mijnbouw 59: 33–42
- 38. 1981 On ascidian actuopaleontology Neues Jahrbuch für Geologie und Palaontologie Monatshefte 1981 (2): 76–83
- 39. 1981 (with M. Wijsman-Best). *Pocillopora* in the Miocene reef at Baixo, Porto Santo (Eastern Atlantic) Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen B 84 (1): 13–20
- 40. 1981 (with G.P. Gonggrijp). Earth science conservation: no science without conservation – Geologie en Mijnbouw 60: 433–445
- 41. 1982 (with M. Wijsman-Best). On the coral fauna in the Miocene reef at Baixo Porto Santo (Eastern Atlantic) Netherlands Journal of Zoology 32: 412–418
- 42. 1982 A teacher in two worlds. In: Von Koenigswald Memorial Volume Modern Quaternary Research in Southeast Asia 7: 33–34
- 43. 1983 (with P. Buurman & L.P. van Reeuwijk). Zeolites palygonskite as weathering products of pillow lava in Curaçao – Geologie en Mijnbouw 62: 409–415
- 44. 1984 Indonesische stenensprokkels Grondboor & Hamer 38: 134–140
- 45. 1984 Koraalrifonderzoek Natuurkundige Voordrachten, Nieuwe Reeks 62: 152–154
- 46. 1984 (with M. Borel Best & A. Oosterbaan). Species concept and ecomorph variation in living and fossil Scleractinia – Paleontographica Americana 54: 70–79
- 47. 1984 Lemmata Geologie Encyclopedie Nederlandse Antillen (2nd edn), Zutphen
- 1985 (with J. Bijma). Recent bryozoan reefs and stromatolite development in brackish inland lakes, SW Netherlands – Senckenbergiana Maritima 17: 163–185
- 49. 1987 (with M. Borel Best & H. Moll). Investigations of recent and fossil coral reefs in Eastern Indonesia (Snellius II expedition), a preliminary report – Proceedings 5th International Coral Reef Symposium (Tahiti) 6: 311–316
- 50. 1987 Een mammoetenkenner (Dick Mol) Grondboor & Hamer 41: 145–147
- 1987 (with P.H. Lambers). Fossil and recent borings of acrothoracic cirripeds – Geologie en Mijnbouw 65: 257–268
- 52. 1987 (with E. Gittenberger). Fossil terrestrial snails (Mollusca: Gastropoda) from the Cape Verde Archipelago – Basteria 51: 125–127
- 53. 1987 Conservation of geological sites. In: Visser, W.D., J.I.S. Sonneveld & A.J. van Loon (eds) Seventy-five years of geology and mining in the Netherlands Royal Geological and Mining Society of the Netherlands (Den Haag): 81–84
- 54. 1987 (with M. Borel Best). Fossil and recent shallow water corals from the Atlantic Islands off Western Africa Zoologische Mededelingen 62: 99–112
- 55. 1988 Comparative qualitative studies on coral species composition in various reef sites in the eastern Indonesian archipelago Proceedings 6th International Coral Reef Symposium 3: 197–204
- 56. 1988 (with A.C. Van der Raad, J.A.M. Kenter & J.J.G. Reymer). Note on a mid-Proterozoic stromatolite limestone, south of Grythyttan, Bergslagen, Sweden Geologie en Mijnbouw 67: 467–469
- 57. 1988 Terugzien op Snellius II Grondboor & Hamer 42: 39–42

- 58. 1989 (with M. Borel Best, A. Oosterbaan & F.M. Molenkamp). Past corals and recent reefs in Indonesia – Netherlands J Sea Res. 23: 117–122
- 59. 1989 Van den beginne Teylers Magazijn 23: 9-12
- 60. 1991 (with P.H. Lambers). Fish remains from the Aptian near Bentheim, Germany Geologie en Mijnbouw 74: 35–41
- 61. 1992 Zwerfstenenonderzoek: verleden, heden en toekomst Grondboor & Hamer 46: 31–35
- 1994 (with M. Borel Best & J. van der Land). The Seychelles carbonate platforms – Oceanic Reefs of the Seychelles 2: 183– 192
- 63. 1995 (with M. Borel Best). Evolution of Indonesian coral reefs. In: Tomascik, T. (ed.) Evolution of Indonesian seas, Part. 1, Vol. 7 – Periplus Editors (Singapore): 199–206
- 64. 1995 Stromatoliet op rif: een Zeeuwse specialiteit Grondboor & Hamer 49: 54–56
- 65. 1996 Een gedeelde passie voor geologie: amateur en beroeps Grondboor & Hamer 50: 129–131