In and out of Africa: Dr A.C. van Bruggen, keen educator and eminent biologist


A.S.H. Breure, National Museum of Natural History, P.O. Box 9517, 2300 RA Leiden, The Netherlands (breure@naturalis.nl); E. Gittenberger, Ibidem (gittenberger@naturalis.nl); W.J.M. Maassen, Ibidem (maassen@naturalis.nl); A.J. de Winter, Ibidem (winter@naturalis.nl).

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A brief biography of A.C. van Bruggen is presented, with special emphasis on his scientific career, on the occasion of his 80th birthday. His many-fold interests and publications are highlighted and eponyms are listed that were introduced in the entomological and malacological literature. A list of new taxa proposed in malacology, entomology and botany is presented.

Introduction

“Semper aliquid novi Africam afferre” — Plinius Secundus

This paper, dedicated to our esteemed colleague and friend Dr A.C. (Dolf) van Bruggen, on the occasion of his 80th birthday, presents a brief biography, all new taxa that were named in his honour (eponyms, Appendix 1), and a list of new taxa proposed by him (Appendix 2). As Dolf van Bruggen has always been interested in the tropics, it was by mere chance that he spent 10 years in Africa. In and out of Africa, this continent has dominated his broad scientific interest for more than 50 years now.

The early years

Natural history and particularly animals have always caught Dolf van Bruggen’s attention. At the age of four, he already deposited garden slugs on the kitchen table. Some years later, an aunt who recognized his biological interests, presented him with a terrarium. However, his mother did not like lizards in the house and the terrarium was immediately returned to the shop. Nevertheless, the young van Bruggen had made up his mind and wanted to become a biologist. From then on he started to collect leaden figures of zoo animals.

Born on 9 July 1929 as the eldest son of A.C. van Bruggen, Sr. and A.C.G. van Bruggen-van Eyk Bijkeveld, Dolf spent his youth in The Hague. His father was a high-ranked civil servant at the Ministry of Education, Arts and Sciences. The Rijksmuseum van Natuurlijke Historie resorted under that ministry at the time, and when Dolf graduated from the Gymnasium Haganum in The Hague in 1949, his father introduced him to Dr C.O. van Regteren Altena, curator of Mollusca at the museum, who stimulated his malacological interests. At Leiden University Dolf studied systematic botany, animal ecology
and systematic zoology. In 1956 he graduated, after acting three years as an assistant to Prof. Dr H. Boschma, the director of the Rijksmuseum van Natuurlijke Historie, who taught Systematic Zoology at Leiden University.

The start of his malacological career may be dated back to 1948, when he became a member of the Dutch Malacological Society (NMV). Dolf's first malacological publication, in Dutch, appeared in 1948 in the Dutch journal *De Levende Natuur*, a short note reported the find of the marine bivalve *Anomia ephippium*, an uncommon species in the Netherlands. His very first publication had appeared earlier in the same year in the same journal, and reported the sighting of seals and a horse mackerel on the Dutch beach.

It was also in Leiden that he met his wife, Wenda van Bruggen-Gorter. She became painfully aware of his malacological interests when one day on their honeymoon in Switzerland, they were returning home late in the evening and Dolf found a beautiful specimen of the slug *Limax cinereoniger* that he wanted for his collection. However, not having any glass vial with him – plastic bags were unknown in those days –, he asked for Wenda's evening bag to bring the animal home.

Originally intending to depart to the Dutch East Indies (now Indonesia) after his study, this became impossible when the former Dutch colony declared independence on 27 December 1949. Since Dolf had a firm interest in the tropics, the van Bruggens decided to move to Africa instead.

**In Africa (1957-1966)**

They sailed to South Africa, stopping on their way at the remote Atlantic island of St Helena, in May 1957. Dolf had to make breakneck manoeuvres to reach the shore with a ‘klepdoos’ (a sweeping separator; see also Van Tol, 1995), thought by fellow-travellers to be a Geiger counter. In South Africa, Dolf had accepted a job at the Ministry of Agriculture in Pretoria. There he was charged with the study of insects and the problems they caused in warehouses ('gestoorde graaninsekte'). After three years he accepted the position of Marine Biologist and Curator at the newly erected Oceanarium in Port Elizabeth. Since it was the first institute of its kind in Africa, there were many start-up problems. When, shortly afterwards, the Natal Museum in Pietermaritzburg offered him a position as curator of malacology, it was an offer he could not refuse. Both he and Wenda worked at the museum from 1962 to 1966; she as a librarian and his personal assistant in the field. They frequently went out for fieldwork, taking the opportunity whenever the museum's Landrover was available to make collection trips as far north as Malawi and Zambia. Dolf always took notes in his fieldbooks, which became more elaborate over the years. His *Africana Biologica* now contains 1550 pages, in eight parts (fig. 1).

During his African years Dolf not only worked on insects and his favourite snails, but also paid attention to the two other groups that had his firm interest: mammals and birds. He made many contacts with managers and rangers of National Parks, and became actively involved in nature conservation. His stay amidst the African wildlife also further stimulated his interest in zoos. In 1963, at the 125th anniversary of Artis Zoo in Amsterdam, Dolf sent a number of 'dassies' (hyraxes, *Procavia capensis*) off by plane, as a gift from Dutch biologists working in South Africa.

'Dear Dolf, it is time to return to Holland and to educate the students here with the many insights you have learnt in Africa.' That was essentially the message that Prof. Dr
Van der Vecht, chairing Systematic Zoology at Leiden University, sent to Dolf in the beginning of 1966. Some months later the van Bruggens sailed back to The Netherlands. Their cat travelled by plane and was hosted in Blijdorp Zoo until they arrived.

**Out of Africa..., most of the time (1966-now)**

In Leiden, Dolf was charged with the education of undergraduates in Systematic Zoology. In 1969 he received his Ph.D. with the thesis ‘Studies on the land molluscs of Zululand with notes on the distribution of land molluscs in Southern Africa’. His supervisor was Prof. Dr L.D. Brongersma, director of the Rijksmuseum van Natuurlijke Historie.

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**Fig. 1. Selected text from Africana Biologica, part VIII, page 50. ‘Studiereis Malawi, samen met W, 19 mei – 11 juni 1993’, 7.vi.1993.**

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Dolf arrived at the rise of the ‘roaring sixties’ at the university, with students claiming more say and quickly becoming on familiar terms with their teachers. However, for most students he remained ‘Dr van Bruggen’ until they had finished their Ph.D. and were found to be at the same level. Nonetheless, his lectures were highly appreciated and much to his own surprise he was once voted ‘most popular teacher’ (fig. 2). Students received his almost yearly excursions to Antwerp Zoo with much enthusiasm.

Although officially employed by the University, his actual place of work was a few minutes away at the Rijksmuseum van Natuurlijke Historie. This enabled him to consult the extensive library and to work with the collection of the museum. Each year he and Wenda travelled to London, to visit the British Museum (Natural History) and meet colleagues and friends.

Besides his work he devoted much time to organisations which he felt needed his support. The Dutch Malacological Society (Nederlandse Malacologische Vereniging, NMV) benefitted most from his energy, where he served as Secretary (1953-1956), interim President (1970-1972) and Treasurer (1983-1986) on the Board. Incidentally, Wenda served also as Treasurer of the NMV during several years. Dolf was editor of the Correspondentieblad (1951-1953) and, after a short interruption, again from 1954 to 1956. Moreover, he acted for more than 40 years as editor and editor-in-chief of Basteria, scientific jounal of the NMV (from 1968 to present) (see also Van Gemert, in press). He was elected Honorary Member of the Society in 1999 (fig. 3).

Furthermore, he was President of the successful 7th International Malacological Congress in Amsterdam (1977), organized on behalf of Unitas Malacologica, the inter-
national organisation of malacologists. From 1989-1999, Dolf was chairman of the Netherlands Commission for International Nature Conservation, also serving as editor of its communications. Furthermore, he devoted energy to the Netherlands Zoological Society, the (former) Netherlands Foundation for Biological Research and the Dutch/Belgian Mammal Society. His interest in zoos is also demonstrated by his huge collection of zoo guides, for which he built a network of contacts all over the world.

He retired in 1994, with a lecture entitled ‘Semper aliquid novi ex Africam adferre’, which may be translated as ‘there is always something new from Africa’, and which may be regarded as Dolf’s personal motto. Afterwards he continued his studies as an associate of the Leiden museum, spending most of his days in the building at the Raamsteeg and later at the Darwinweg in Leiden, where he continued to study and publish on Mollusca and other topics.

In 1973, Dolf and Wenda were asked by a relative to guide a safari to Kenya and Tanzania. This became the start of an annual event that would last until 1990. The trips were soon organized by a travel agency and a group comprised of regularly participating people, some of whom have become intimate friends of the guiding couple. Each trip was carefully prepared, with a bibliography sent to the participants. Afterwards a list of all the observed mammals and birds was distributed additionally.

After 1990, Dolf and Wenda made several private trips to southern Africa, visiting friends and relatives on their way. When Dai Herbert during their 2008 trip asked if Dolf would cooperate in revising some material collected in Drakensberg Mountains, he wholeheartedly accepted the opportunity to continue with his great love: land snails of South Africa.
Dolf van Bruggen’s wide interest in systematic biology and related fields are reflected in his numerous publications, which cover topics as diverse as marine and non-marine Mollusca, mammals, amphibians, reptiles, birds, insects, as well as zoo biology, museum collections, nature conservation, bibliographical matters, and historical accounts, apart from numerous book reviews and obituaries, to name only the fields on which he wrote more than a single contribution. The complete listing of his 655 publications up till 2008 can be accessed at http://science/naturalis/vanbruggen. The flow of publications over the years since 1948 continues to the present and has never been interrupted. Fluctuations in his production have been relatively small. On average, 11 papers appeared annually. There has never been a year with less than four papers and that happened only once. Dolf’s most productive years (in number of papers) are 1960-1966, when he resided in South Africa; 1961 has been his most productive year with 23 papers. His most important scientific contributions concern the fields of malacology, entomology and botany. His botanical publications are restricted to the year 1958, when he published two systematic papers on Sapotaceae from Borneo with the description of a new genus and two new species. His entomological production lasted longer, from 1954 to 1963. In this period, he published 18 papers, mainly on Ephemeroptera from Southeast Asia and New Guinea, and on Diptera from southern Africa, thereby introducing 14 new species and two new genera. The vast majority of his scientific papers dealt with the systematics and biogeography of the Mollusca. In the early period of his career he published on both marine and non-marine taxa, but the former more or less stopped after 1963, possibly related to his move from a marine institute at Port Elizabeth to the Natal Museum at Pietermaritzburg. Most of Dolf’s scientific work has been devoted to land snails, especially those from subsaharan Africa and the islands surrounding this continent. Although there are few families on which he has not published, there are three families that may be considered his particular area of expertise and fascination: the pulmonate families Streptaxidae and Achatinidae and the operculate (caenogastropod) family Maizaniidae. The interest in the carnivorous family Streptaxidae was undoubtedly raised by Dolf’s prolonged stay in South Africa, quite possibly inspired by Connolly’s (1939) impressive monograph on the South African non-marine Mollusca, in which a picture of an extremely diverse and aesthetically appealing streptaxid radiation was painted. In all, he described three new genera and 60 new species and subspecies of Streptaxidae, all but four from Africa. Achatinidae are a family of rather large land snails, and, in spite of their size, one that poses tremendous taxonomic problems, and Dolf is one of the few people who knows his way in the chaotic taxonomy of this group. He devoted various papers partly or wholly to the family and introduced six new species and subspecies. He was a friend of the recently deceased American Achatinidae specialist Albert Mead (1915-2009). They regularly exchanged opinions, but did not publish jointly. A third group that apparently has his special interest are the terrestrial operculates, formerly known as ‘Prosobranchia’, a heterogeneous assemblage of gastropods with an
operculum and separate males and females (in contrast to the hermaphrodite pulmonate land snails). Operculate gastropods appear to be particularly poorly represented in subsaharan Africa in comparison to other continents, especially tropical Asia. Since the early 1980s Dolf has taken it on him to revise the African representatives of this group, especially the families Maizaniidae and Cyclophoridae. This study resulted in the description of three new subgenera and ten new species (thereby doubling the number of African taxa known), and a series of papers with careful descriptions, keys and biogeographic analyses of the ‘prosobranch’ fauna in Africa and beyond.

To paraphrase the words of the Dutch writer Cees Nooteboom: ‘A great biologist is invisible behind his publications.’ It is precisely what this paper intends to prevent.

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References

Gemert, L. van, in press. Survey of the members of the Board and of the editors of the Netherlands Malacological Society during its 75 years existence (1934-2009). — Spirula (in Dutch).


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Appendix 1

Eponyms

The following taxa have been named in honour of Dolf van Bruggen. Their systematic position is given in parenthesis:

**Insecta**


*Notiophygus vanbruggeni* John, 1964: 179, fig. Type locality: Zululand (Coleoptera, Discolomidae) [taxon mentioned in the Zoological Record, but not found in publication].


*Selinda bruggeni* Theron, 1986: 161, figs 76-85. Type locality: Zimbabwe, Chirinda Forest, Mount Selinda (Homoptera, Cicadellidae).

*Spinotarsus bruggenorum* Kraus, 1966: 115, figs 263-265. Type locality: Zululand, Ndumu Game Reserve, Engabateni forest (Diplopoda).

**Mollusca**


*Bruggenina* Mead, 2004: 443. Type species by original designation *Archachatina sandgroundi* Bequaert, 1950 (Achatinidae).


*Centrafricarion bruggeni* Van Mol, 1970: 192, figs 128a, 129a, 130a, 132, 133. Type locality: Malawi, Nyika Plateau, Zozu Chipolo Forest (Urocyclidiae).


*Cingula bruggeni* Verduin, 1984: 56, figs 20, 69. Type locality: Spain, Strait of Gibraltar, Tarifa (Rissoidae).

*Cyclostremiscus vanbruggeni* Kraus, 1966: 115, figs 263-265. Type locality: Zululand, Ndumu Game Reserve, Engabateni forest (Diplopoda).


*Gulella mkuu* Rowson, Seddon & Tattersfield, 2009: 652, figs 2-13. Type locality: Kenya, Rift Valley Province, Samburu District, Ndoto Mountains (Streptaxidae).

*Inchoatia megdova bruggeni* Gittenberger & Uit de Weerd, 2009: X, fig. 1. Type locality: Greece, Thessalia, Trikala, 7.5 km WNW of Pyli (= Pili), 8.5 km S of Elati along road to Agi. Prokopios (Clausiliidae).

*Mitrella bruggeni* van Aartsen, Menkhorst & Gittenberger, 1984: 37, 78. New name for *Mitrella broderipi* auct. not Sowerby, 1844 (Columbellidae).

*Parennea vanbruggeni* de Winter, 2008: 217, figs 3-4. Type locality: Cameroon, Sud Province, Meka’a-II, W of Nyongong (Streptaxidae).

*Plekocheilus (Eurytus) bruggeni* Breure, 1978: 9, pl. 6 figs 5-7. Type locality: Peru, Dept. Pasco, Huancabamba (Orthalicidae).

*Sunetta bruggeni* Fischer-Piette, 1974: 281. New name for *Sunetta ovalis* Sowerby, 1892 not Martin, 1880 (Veneridae).
Appendix 2

New taxa introduced by A.C. van Bruggen

Taxa are listed alphabetically, separately for Mollusca, Insecta, and Plantae. Information of each taxon is provided in the following string: name of introduced taxon, author(s), year of publication, genus (subgenus) and/or species to which the new taxon was attributed or the type species/genus in case of a supraspecific taxon, reference, the state embracing the type locality according to the publication [modern name of country if applicable], acronym of institute where holotype is kept, higher taxonomic position.


Mollusca

adami van Bruggen, 1994, Gulella, Zoologische Mededelingen Leiden 68: 2, Ivory Coast [Côte d’Ivoire], IRSNB (Stylommatophora, Streptaxidae).

adami van Bruggen, 1994, Truncatellina, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen 97: 23, Fernando Poo [Bioko, Equatorial Guinea], IRSNB (Stylommatophora, Vertiginidae).


aenigmatica van Bruggen, 1977, Archachatina (Tholachatina), Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 80: 251, Rhodesia [Zimbabwe], MCZ (Stylommatophora, Archachatinae).

Afroconulus Van Mol & van Bruggen, 1971, type species Sitala diaphana Connolly, 1922, Revue de Zoologie et de Botanique Africaine 84: 286 (Stylommatophora, Euconulidae).

Afroguppya de Winter & van Bruggen, 1992, type species Thapsia rumrutiensis Preston, 1911, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen 95: 529 (Stylommatophora, Euconulidae).


altiplani van Bruggen, 1989, Ptychotrema (Parennea), Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 92: 6, Malawi, RMNH (Stylommatophora, Streptaxidae).
aranearum van Bruggen, 1986, Gulella, Revue Zoologique Africaine 100: 259, Malawi, MRAC (Stylommatophora, Streptaxidae).
augur van Bruggen, 1988, Gulella (Primigulella), Basteria 52: 127, Tanzania, ZMUC (Stylommatophora, Streptaxidae).

Austromarconia van Bruggen & de Winter, 2003, type species Ennea hamiltoni Smith, 1897, Zoologische Verhandelingen Leiden 345: 79 (Stylommatophora, Streptaxidae).
benthodon van Bruggen, 1980, Gulella darglensis, Zoologische Verhandelingen Leiden 180: 17, South Africa, BM (Stylommatophora, Streptaxidae).


cazombense van Bruggen, 1989, Ptychotrema (Parennea), Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 92: 29, Angola, RMNH (Stylommatophora, Streptaxidae).

ceciliae van Bruggen, 1971, Gulella, Zoologische Mededelingen Leiden 45: 254, Rhodesia [Zimbabwe], RMNH (Stylommatophora, Streptaxidae).

chirindae van Bruggen, 1986, Chondrocyclus, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 89: 375, Zimbabwe, MRAC (Caenogastropoda, Cyclophoridae).

chirindensis van Bruggen & Verdcourt, 1968, Zingis, Revue de Zoologie et de Botanique Africaine 78: 358, Rhodesia [Zimbabwe], RMNH (Stylommatophora, Urocyclidae).

collegarum van Bruggen, 1989, Ptychotrema (Parennea), Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 92: 9, Malawi, RMNH (Stylommatophora, Streptaxidae).

collicola van Bruggen, 1966, Gulella, Archiv für Molluskenkunde 95: 72, Swaziland, NM (Stylommatophora, Streptaxidae).


coryli van Bruggen, 1985, Neomaizania, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 88: 397, Malawi, RMNH (Caenogastropoda, Maizaniidae).
cossyphae van Bruggen, 1989, Ptychotrema (Parennea), Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 92: 36, Uganda, NMN (Stylommatophora, Streptaxidae).

cunctatoris van Bruggen, 1975, Rachis (Rachis), Zoologische Mededelingen Leiden 49: 217, Malawi, RMNH (Stylommatophora, Cerastidae).


grayi van Bruggen & Meredith, 1983, *Fauxulus (Anisoloma)*, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 86: 310, Malawi, RMNH (Stylommatophora, Orculidae).


juttingae van Bruggen, 1972, *Haploptychius*, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 75: 391, Indonesia, RMNH (Stylommatophora, Streptaxidae).


Macromaizaniella van Bruggen, 1982, type species *Cyclophorus preussi* Von Martens, 1892, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 85: 196 (Caenogastropoda, Maizanidae).
multispiralis van Bruggen, 1989, *Ptychotrema (Parennea)*, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 92: 3, Malawi, RMNH (Stylommatophora, Streptaxidae).
Neomaizania van Bruggen, 1985, type species *Neomaizania coryli* van Bruggen, 1985, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 88: 396 (Caenogastropoda, Maizaniidae).
oblquapex van Bruggen, 1974, *Diaphera*, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 77: 274, Philippines, USNM (Stylommatophora, Streptaxidae).
palawanica van Bruggen, 1974, *Diaphera*, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 77: 277, Philippines, USNM (Stylommatophora, Streptaxidae).

*peregrinatum* van Bruggen, 1989, *Ptychotrema (Parennea)*, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 92: 14, Malawi, RMNH (Stylommatophora, Streptaxidae).


*Prestonellidae* van Bruggen, 1978, in Werger (& van Bruggen), ed(s.), type genus *Prestonella* Connolly, 1929, Biogeography and Ecology of Southern Africa (2): 893 (Stylommatophora).

*Pteromaizaniella* van Bruggen, 1982, type species *Maizaniella (Pteromaizaniella) poensis* van Bruggen, 1982, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen 93: 238, Malawi, RMNH (Caenogastropoda, Maizaniidae).


*sorongensis* van Bruggen, 1956, *Pyrene (Mitrella)*, Nova Guinea (N.S.) 7: 11, West New Guinea [Indonesia, Papua] RMNH (Caenogastropoda, Columbellidae).

*Spirulozania* van Bruggen, 1982, type species *Cyclophorus lilliputianus* Morelet, 1873, Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (C) 85: 185 (Caenogastropoda, Maizaniidae).


Insecta


antidorcas van Bruggen, 1961, Pyrgotina, Entomologische Berichten Amsterdam 21: 5, South Africa - Northern Cape, TMP (Diptera, Pyrgotidae).


navasi van Bruggen, 1957, Cloeon, Nova Guinea (N.S.) 8: 37, Chekiang, China, holotype probably in MZB, nom. nov. (Ephemeroptera, Baetidae).

novaeguineae van Bruggen, 1957, Tasmanocaenis, Nova Guinea (N.S.) 8: 32, Indonesia, Irian Jaya (West New Guinea), RMNH (Ephemeroptera, Caenidae).


papuanum van Bruggen, 1957, Cloeon, Nova Guinea (N.S.) 8: 34, Indonesia, Irian Jaya (West New Guinea), RMNH (Ephemeroptera, Baetidae).


**Plantae**


*lamii* van Bruggen, 1958, *Payena*, Blumea 9: 127, Malaysia (Borneo: Sarawak), L (Sapotaceae).

*Pupureopayena* van Bruggen, 1958, Blumea 9: 98, type species *Payena* (*Pupureopayena*) *dasyphylla* (Miquel) Pierre, 1885 (Sapotaceae).