

TOM MÜLLER – AN APPRECIATION

Tom Müller, who died in April 2026 aged 93, was one of Southern Africa's leading experts on native forests and an inspirational landscape gardener. Numerous botanists, ecologists and horticulturalists across the region have been inspired by his approach to landscape and garden design, his ideas on the role botanic gardens can play in conservation, and by his freely-imparted knowledge and experience on moist forest composition and ecology. He designed many gardens in Zimbabwe, the country in which he lived for over 50 years – both private and institutional. But his greatest legacy is probably the design and establishment of Harare Botanic Gardens in Zimbabwe, developed from degraded woodland over a period of 40 years.

One of Tom's great strengths was that he thought from first principles and didn't allow himself to be unduly influenced by what had been published or done elsewhere. In this regard he was a rare exception, neither a regular academic nor a traditional gardener, but a researcher in the true sense – exploring, learning from experience, sometimes going against current orthodoxy. He was an original thinker with artistic vision, coupled with an independent scientific approach.

Thomas Müller was born in Zürich, Switzerland on 4th September 1932, the second of eight children. His mother, Alice Müller-Wersching, ran her own typing agency and spoke numerous languages, while his father, Richard, worked as an accountant. After starting work as an apprentice gardener in Zürich in 1949, Tom obtained a Swiss Diploma in Horticulture in 1952. Then, perhaps recognising his landscape interests and talent, his mother encouraged him to apply for an apprenticeship at Kew in London in 1954, a studentship scheme which later became the Kew Diploma. Tom had a few self-deprecatory stories about his lack of English at this time and how he struggled to understand the course, including listening uncomprehendingly to the comedian Spike Milligan as he practiced his lines for the Goon Show in the Temperate House – something that even native speakers may not have fully understood! Always a keen runner, Tom recounted how he almost made it onto the Swiss athletics team for the 1952 Olympics. He also participated in a number of races at Kew, including being part of the Kew team that came second in the Kew-Wisley relay marathon in 1955, with Tom doing a fast sprint that put Kew in the lead at one point.

After gaining his Certificate of Horticulture from Kew in 1956, Tom returned to Switzerland for a couple of years, including a year curating the Zürich municipal gardens' succulent collection (Sukkulenten-Sammlung Zürich), before returning to the UK in 1958 as Assistant Experimental Officer in the herbarium of the Natural History Museum, London. Here he worked under Arthur Exell and Edmund Launert with Launert becoming a good friend and mentor. Part of Tom's job was writing a family treatment on Geraniaceae for the Flora Zambesiaca project (Müller 1963), a major taxonomic project that had recently started.

In early 1962 an opportunity arose to go out to what was then Salisbury in Southern Rhodesia (now Harare, Zimbabwe) to take on the role of developing and running a new botanic garden. Tom, recently-married, left UK with his wife Sylvia (née Freiesleben), whom he had met in London, for what must have been potentially a very different life. The Southern Rhodesia government had finally got enough funding to develop Alexandra Park in Harare's northern suburbs into a botanical garden and new herbarium (Wild 1963) and the Head of the Herbarium at that time, Hiram Wild, wanted to recruit a Kew graduate to establish it. This was also the time when the herbarium was expanding as Flora Zambesiaca – a taxonomic project which covered what is now Botswana, the Caprivi Strip of Namibia, Zambia, Zimbabwe, Malawi and Mozambique – progressed. As Tom remembers it, Wild had wanted a rather structured and formal garden, with taxonomic beds and showcasing the

breadth of botanical form and interest. However, with his novel ecological approach of recreating natural vegetation types, and perhaps also inspired by the English landscape approach of 'Capability' Brown that he must have come across during his Kew period, Tom had different ideas on what a botanic garden should be and look like. This led to a rather tense decade or more between the two of them. Tom recalls how Hiram Wild rather reluctantly congratulated him in the mid-1970s on the garden's development, saying that perhaps he (Wild) had been wrong in trying to insist on taxonomic beds! Tom developed the 59-hectare site, situated in degraded miombo woodland on red clay soils in Zimbabwe's Highveld, into a mosaic of ecologically-defined clusters, including montane moist forest, Zambezi lowveld and Acacia woodland, all joined by sweeping vistas, with a large lake that also acted as the irrigation source (Müller 1968).

This landscape approach led to quite a bit of local 'concern' but, over the years, this dissipated as local residents and those from further afield could see the garden maturing, the ecological ideas behind it becoming apparent, the celebration of native flora, and realise the wonderful place for relaxation, leisure and learning it had become. The scale of ambition was enormous – who would have thought that one could create a rainforest in Zimbabwe's Highveld on red clay soils, or grow trees suited to the hot, dry Lowveld or deep sands of the Kalahari here? Together with his persistence and horticultural skills, Tom's vision was vindicated, but it took two decades to realise, and is testament to his ability to see a landscape in four dimensions, not just three.

Hiram Wild left the National Herbarium and Botanic Garden in 1965 to become Professor of Botany at the University of Zimbabwe (then Rhodesia). As Tom could not become Head of Institute unless he had a degree, he then started a part-time BSc in Botany and Geology at the University of Rhodesia (then still giving University of London degrees) while he continued to run and develop the gardens. He finally obtained his degree in 1972 and was soon after promoted to Head of Institute. During the 1970s, Tom also undertook numerous plant collecting trips, not only in Zimbabwe but also in neighbouring Malawi, Zambia and (especially) Mozambique, generally focussing on forest areas. Many of these were with Gerald Pope, who was also at the Harare Herbarium (SRGH) and later became Editor of *Flora Zambesiaca* at Kew.

Around 1975 Tom started on a PhD looking at the ecology and distribution of moist forests in eastern Zimbabwe. He wanted to describe, typify and map all existing patches of moist forest across the country and then try to discern their ecological determinants. Such a study required arduous field trips on foot, all with locally-recruited field assistants some of whom became staff members in the herbarium or gardens, to numerous remote areas of Zimbabwe's Eastern Highlands, where the independence struggle was particularly intense. In spite of the dangers there were no mishaps, although Tom later learned that there had been a few near-misses. Between August 1975 and August 1977, he recorded over 170 quarter-hectare plots with all trees being identified and measured, while shrubs and herbs were noted together with ecological information such as soil type. Many new species records for Zimbabwe were found, at least six of which were later described as new to science.

It was a difficult time – developing and managing the botanic garden, running a research institute in the midst of an independence struggle with staff away on call-ups, as well as carrying out fieldwork – all testament to his energy and persistence. At this time, and for the next 20 years, Bob Drummond was Curator at the herbarium and the institution was characterised by their different interests and skills, and their sometimes tempestuous relationship.

The challenges of managing a research institute meant that Tom only started the analysis of his forest data under Prof Brian Walker at the University of Witwatersrand in South Africa in the early 1980s, but it proved difficult to separate statistically many of the forest types or clearly ascribe their ecologically determinant factors. The writing of his thesis was put aside, never to be completed as such. It was only after he ceased to be Head of Institute in 1994 that Tom could finally manually classify and map his plots under a consultancy from the Zimbabwe Forestry Commission (see Müller 1999, 2006), with later papers on phytogeography and forest loss based on its findings (Timberlake, Dowsett-Lemaire & Müller 2021, Timberlake & Müller 2021).

Despite the forest findings not having been fully analysed or written, in the mid-1980s Tom was able to use his knowledge to help get the Nyanga National Park extended to cover much of the natural moist forest area as well as the grasslands. He also actively promoted the botanical significance and conservation of moist forests nationally, a vegetation formation that had too often been ignored owing to the lack of knowledge.

Soon after Independence in 1980, as Zimbabwe opened up after years of semi-isolation during the pre-Independence period, Tom started to put the Harare Botanic Gardens and herbarium on the international map. As well as residents, newly-arrived aid workers and others saw and enjoyed what had been achieved over the previous two decades, and some stepped in to support it through a newly-formed Botanic Garden Fundraising Committee, partly releasing the gardens from the limitations of government funding. Later, in 1988, Tom became a recipient of UNEP's Global 500 award for Environmental Achievement for the design and development of the gardens. And with an increasing international interest in genetic conservation and seed banking, he articulated how a botanical institute, encompassing a herbarium, botanic garden, genebank and ecology unit, could combine to support both in situ and ex situ botanical conservation (Müller 1983, 1994). In 1986, in conjunction with a parallel soils survey implemented by the agricultural research department, the herbarium was finally able to recruit an ecologist to carry out a vegetation survey of Zimbabwe's rather-neglected communal lands and identify potential conservation areas, a position occupied by the present author from 1988 (Müller & Timberlake 1992; Timberlake, Nobanda & Mapaire 1993; Timberlake & Müller 1994). Tom was also very involved in regional genebank initiatives in the late 1980s and early 1990s, becoming Chair of the National Genetic Resources Committee and helping get the SADC Regional Plant Genetic Resources Centre established in Lusaka. He also took part in international seed collecting trips to Soviet Central Asia and Siberia in 1989, and to the Andes and Patagonia in 1991.

In 1993, Tom was forced to retire as Head of Institute but stayed on a further three years as consultant to the Botanic Garden Fund Committee, which had received a large donation for garden development from the EU. This allowed for the construction of a desert glass house, Education Centre and cafe. At this time, in 1994, he received the Presidential Award for Biology and Conservation from the Research Council of Zimbabwe and was also awarded an honorary doctorate (DSc *honoris causa*) from the University of Zimbabwe in 1995 for his achievements in establishing the botanic garden and his forest studies.

During the mid-1990s through to the mid-2000s Tom undertook a number of consultancies across Zimbabwe in vegetation survey, in particular for establishing ecological baselines and advising on restoration and landscaping post-mining. He was also called upon by large companies, hotels, as well as private individuals, for landscaping developments. Previously, in the 1980s, he had landscaped Heroes Acre in Harare and the new Harare Conference Centre and Sheraton Hotel, while later in the 1990s he landscaped and planted the grounds of the Elephant Hills Hotel and Kingdom Hotel at

Victoria Falls, and the Westgate shopping centre in Harare and Nkulumane shopping centre in Bulawayo, amongst others. One of Tom's trademarks, building on his experience in developing the botanic garden, was the technique of transplanting semi-mature trees such as baobabs and others so that the hotel grounds did not need decades to look established.

In his later years, Tom was involved in some fairly major vegetation and botanical surveys – of the Zambezi Delta with Jonathan Timberlake and Anthony Mapaura in 1999 (Müller et al. 2000), Mt Gorongosa in central Mozambique with Anthony Mapaura, Bart and Petra Wursten in 2007 (Müller et al. 2008), the coastal dry forests of north-eastern Mozambique with ProNatura and Kew in 2008-9 (Timberlake et al. 2010, 2011), and Gonarezhou National Park in south-east Zimbabwe with Rob Cunliffe and Anthony Mapaura in 2010-2011 (Cunliffe et al. 2012). Each involved lengthy and arduous fieldwork, which Tom took to with gusto as it enabled him to explore areas and trees that he had not previously encountered as well as revisit old haunts from his earlier days.

His wife, Sylvia, had moved to Herne Bay in Kent, UK in the early 2000s as economic conditions in Zimbabwe became harder. Tom remained in Harare in his North Avenue town house, with its wonderful garden and an incredible range of species crowded into a relatively small space, but he would spend some months each year in the UK with his wife and daughters. However, during Covid in 2020, he was not able to return to Zimbabwe and his health deteriorated. Getting increasingly frail, Tom moved into a retirement home near Zurich supported by his brother and family in September 2022. Sylvia died in Gravesend in Kent in April 2026, just before Tom. He is survived by his two daughters Anita and Amanda.

Tom had a unique style of his own, both in the office and the field. Forward-thinking, combined with an almost old-fashioned consideration and charm, he loved art, good food and had high standards. However, he lived simply and adapted to the toughest of situations. Many are the stories over the years about his fieldwork exploits – some of them described in numerous appreciations in *Tree Life*, the newsletter of the Tree Society of Zimbabwe (see <https://treesociety.org.zw/tree-life/>, nos. 387, Nov 2012; 388, Dec 2012; 549, May 2026). He was renowned for doing fieldwork in just shorts, sometimes with a vest, right up to his late 70s, often armed with a panga for slashing the bark of trees for identification and sitting on the bonnet of a Landrover rather than inside so he could concentrate better on the vegetation. Like many original thinkers, he found bureaucracy and pedantry frustrating, and preferred to discuss ideas and thoughts rather than accepted or published findings. Sometimes discussions could be prolonged, occasionally due to having different understandings of certain words or terms, but he was always open to new ideas. Tom was a great mentor to a number of botanists, including myself, and an inspiration to many naturalists, tree enthusiasts and horticulturalists across southern Africa and elsewhere. His ecological insights and knowledge will long be remembered and valued.

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Jonathan Timberlake, September 2026

Species named after Tom Müller

Pavetta muelleri Bridson (illegitimate name, now *P. bridsoniae* P.I.Forst.) (Rubiaceae).

Ficus muelleriana C.C.Berg (Moraceae).

Synsepalum muelleri (Kupicha) T.D.Penn. (synonym *Vincentella muelleri* Kupicha) (Sapotaceae)

Vernonia muelleri Wild (Asteraceae).

Species with a Tom Müller type specimen

Dorstenia zambesiaca Hijman (Moraceae) – Pope & Müller 520. Moz: Inhaminga (MS).

Anisotes nyassae C.Baden (Acanthaceae) – Müller 1675. Malawi: Misuku hills (N).

Pavetta bridsoniae P.I.Forst. (previously *P. muelleri* Bridson, illegit.) (Rubiaceae) – Müller 2654. Zim: Nyanga(E).

Pentas zanzibarica (Klotsch) Vatke var. *haroniensis* Verdc. (Rubiaceae) – Müller & Gordon 1844. Zim: Haroni (E).

Rytigynia sp. E of FZ 5.2 (Rubiaceae) – Müller & Gordon 1785. Moz: Serra Mocuta (MS).

Streptocarpus acicularis I.Darbysh. & Massingue (Gesneriaceae) – Pope & Müller 1307. Moz: E Chimanimani (MS).

Synsepalum muelleri (Kupicha) T.D.Penn. (Sapotaceae) – Müller 1463. Malawi: Mt Mulanje (S).

Vernonia muelleri Wild (Asteraceae) – Müller & Kelly 1098. Moz: S Chimanimani (MS).

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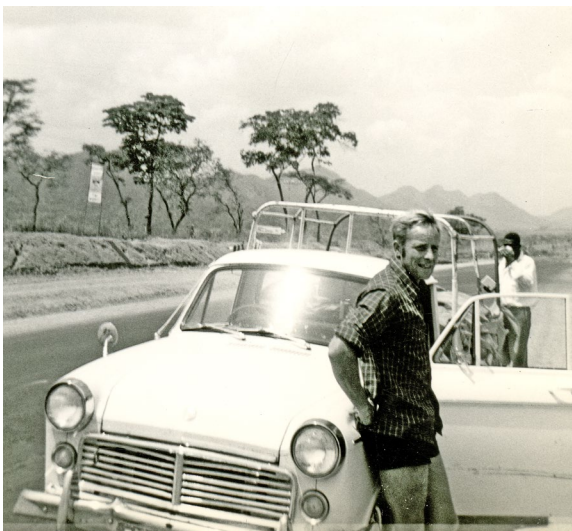
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Harare Herbarium with Brian Simon & D. Gilbert-Green, 1970s



Botanic Gardens, Harare, 1992 [KD]



Fieldwork, Malawi, 1969 [AB]



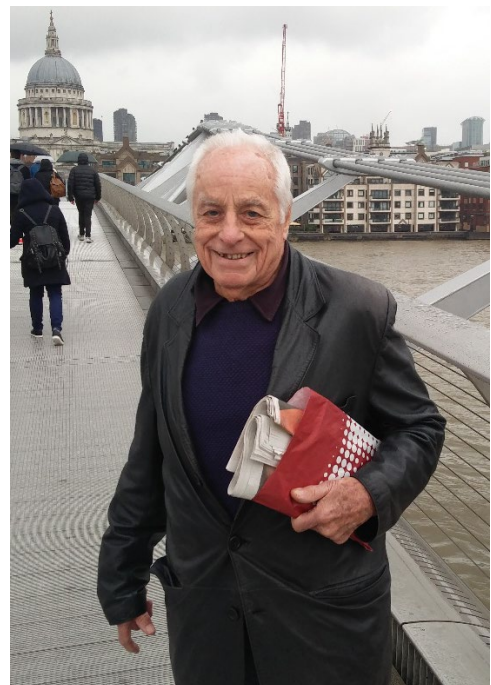
Cabo Delgado, N Mozambique, 2008 [JT]



Sussex, UK, 2008 [AB]



With Olivier Pascal, N Mozambique, 2009 [JT]



London, 2018 [AB]