CHRISTOPHER DONALD PIGOTT (1928-2022)

ur long-standing member Donald Pigott died on 11 September 2022. He joined the BSBI's precursor, the Botanical Society and Exchange Club, in 1945. He was an outstanding botanist, particularly as a plant ecologist but with strong research skills in taxonomy, cytology, vegetation history, soil science and plant geography. He was also active in conservation. His first publication in 1951 was in Watsonia about the discovery of Scutellaria hastifolia (Norfolk Skullcap) in Britain. He published occasionally in Watsonia and BSBI News. He was very involved (1955-59) in the BSBI Committee responsible for the preparation of the 1962 Atlas of the British Flora, and he undertook the onerous task of editing all the maps. He



Donald Pigott, The Valais, Switzerland, 1946.

also served as the BSBI referee for *Thymus* (thyme) and *Tilia* (lime).

Donald was born in Sutton, Surrey on 7 April 1928, the son of Helen (née Lee) and John Pigott, a mechanical engineer and subsequently a tea importer. Helen was not only a gifted pianist but also very interested in plants. She taught Donald from an early age how to identify plants. He attended Mill Hill School in north London but in World War II the school was evacuated to Cumbria. He became fluent in German whilst recovering from tuberculosis in a Swiss sanatorium in the early days of antibiotics. In 1946 he won an Open Exhibition in Natural Sciences at Emmanuel College, Cambridge where he read Botany, Chemistry, and Geology in Part I of the Natural Sciences Tripos (1946-48). He was awarded a Major College Scholarship in 1947, and the Shell Scholarship in Geology and the Frank Smart Prize in Botany in 1948. He read Botany in Part II of the Tripos (1948-49), gaining a First and being awarded the Frank Smart Studentship in 1949. For his PhD, Donald studied the taxonomy, ecology, cytology and biogeography of the three native species of Thymus in Britain and Ireland under the supervision of Sir Harry Godwin. Donald was part of the outstanding group of young Cambridge botanists in the early 1950s including Max Walters, Michael Proctor, David Coombe, Franklyn Perring and Peter Sell. At the suggestion of Max, Donald visited Uppsala and Helsinki in the summer of 1949 where he became acquainted with work on mapping vascular plant occurrences in Europe. In his 1955 Biological Flora of Thymus, Donald published the first distribution 'dot' maps using 10×10km grid squares that became a ubiquitous mapping standard for British and Irish biota. He found that it was impossible to produce an adequate map of the common Thymus drucei (Wild Thyme) using herbarium material alone, and this was a fundamental consideration when the methodology of the BSBI Maps Scheme was developed.

One of Donald's teachers in Cambridge was Max Walters who was immediately impressed not only by Donald's enthusiasm for plants and his ability to name them but also by his excellent botanical drawings. They became friends, made many joint excursions, and published together. As research students, Donald and David Coombe were asked to assist in the design of the Cambridge University Botanic Garden's ecological 'limestone mound', in the choice of native plants to be planted, and, together with Max and others, in collecting material from the wild.

In 1951 Donald moved to Roy Clapham's Department of Botany at the University of Sheffield to be an Assistant Lecturer and then in 1954 to be a Lecturer. Whilst in Sheffield, Donald studied various aspects of the ecology of Peak District woodlands and grasslands, including the detailed ecology of *Polemonium caeruleum* (Jacob's-ladder) and *Cirsium acaule* (Dwarf Thistle). He also published two 'classic' papers — one with Max Walters on plants with discontinuous distributions in Britain and Ireland (e.g. *Helianthemum oelandicum*, Hoary Rockrose) and one on the vegetation of Upper Teesdale. He also started detailed studies on soil formation and development on the Carboniferous limestone of Derbyshire.

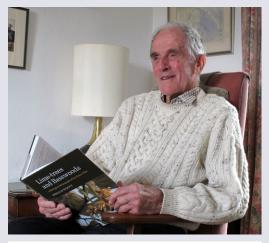
Donald returned to Cambridge in 1960 to be a University Lecturer in Botany and in 1962 a Fellow and College Lecturer at Emmanuel College. Besides his outstanding teaching, Donald's research was mainly on plant-soil interactions with doctoral students P.S. Lloyd, M.H. Martin and S.J.P. Waters. Michael Martin and Donald worked in Hayley Wood, 12 miles (19 km) west of Cambridge. As a result of this work in the wood, Donald became aware that the owner was thinking of selling it to a Bedfordshire timber merchant to have it cleared. Donald persuaded an initially reluctant Cambridgeshire Wildlife Trust to launch an appeal to buy the wood for £,5000, and it became its first reserve. In 1962 Oliver Rackham, who at that stage was working for his PhD on the energy balance of leaves using his training in mathematics, physics and botany, visited Hayley Wood with Donald. Oliver became totally fascinated by the wood and its history and went on to publish a book about Hayley Wood in 1975.

In 1964 Donald was invited to be Professor of Biology within the newly created University of Lancaster. He served as Head of Department until 1978 and continued as Professor until 1984. He instigated one of the first undergraduate degrees in Ecology which involved both the Biology and Environmental Sciences departments. Developing the Biological Sciences Department from scratch was a very demanding challenge and it involved a considerable amount of administrative and committee work. Donald also became increasingly involved in many national and international committees. He led the National Vegetation Classification (NVC) project supported by the Nature Conservancy Council (1974-81) along with Derek Ratcliffe, Michael Proctor, Andrew Malloch, and others including myself. He served on the Council of the National Trust (1980–86), providing the Trust with ecological advice. Despite all these commitments, Donald maintained his research on a range of ecological topics, particularly the ecology, history and reproductive biology of Tilia cordata (Small-leaved Lime), growing near its north-western range limit in Britain.

Donald returned to Cambridge in 1984 to be Director of the Cambridge University Botanic Garden and Professorial Fellow at Emmanuel College. This was at the time the Garden was seriously threatened by financial cuts. Shortly after he became Director, a gale and the Great Storm of 1987 blew down many trees including some of the foundation trees that had been planted in 1846. Donald and his garden staff almost welcomed the challenge of planting new trees, including some limes. Another challenge was to renovate the ecological 'limestone mound' that he had helped design and stock over 30 years earlier. In 1990 the University conducted a five-year review of the Garden to assess 'future funding, management and constitutional position of the Botanic Garden'. The review proposed that after Donald's retirement in 1995, the Garden would become a City Park, thus losing much of its scientific and research status. Donald vigorously defended the Garden's status as a local, national, and international resource and convinced the Review Board that the Botanic Garden should remain as part of the Botany School (renamed Department of Plant Sciences in 1991). Donald was delighted when his successor John Parker was appointed as John was also an academic botanist and would continue to grow plants in the Garden for research purposes.

Donald retired in 1995 and settled in Greenbank near Cartmel. He developed a fine garden there with an arboretum of 20 Tilia species, including one described by Donald, T. concinna Pigott, from China. He and his wife Sheila travelled widely in Europe, Asia, North America, and Mexico to observe different Tilia species in the field. In 2012 he published his major monograph, Lime-trees and Basswoods – A Biological Monograph of the Genus Tilia, illustrated with his elegant and accurate drawings. It presents a revised taxonomy of 23 species and 14 subspecies world-wide, along with details of their cytology, distribution, variation, ecology and history. In 2020 Donald published his last scientific paper, appropriately the Biological Flora account of T. platyphyllos (Large-leaved Lime) to accompany his 1991 account of T. cordata.

In addition to all his university work and research, Donald was deeply involved in conservation matters, in particular the controversial proposal from ICI in 1964 to construct the Cow Green reservoir in Upper Teesdale. He appeared as an expert witness to the



The author with the newly published Lime-trees and Basswoods, 2012. *Joan Futty*

Parliamentary Inquiry that reviewed the proposal. Although its construction was not prevented, the controversy possibly served as a turning point in conservation by highlighting the real need to give more weight to environmental issues in the planning of major construction projects. ICI never, in fact, used a single litre of water from the reservoir!

Donald was also involved in a campaign to save the wonderful limestone pavement at Gait Barrows in north Lancashire. This led to the area being designated a National Nature Reserve in 1977. In 1981 the area received additional protection with the creation of Limestone Pavement Orders which made it a criminal offence to remove any part of the limestone.

Donald published one major book (2012) and a small book on Lime trees (2005), over 100 scientific articles and book chapters (1951–2020), and many book reviews as well as being a co-editor of the five NVC volumes (1991–2000). He was an editor of the *Journal of Ecology*'s Biological Flora series for over 25 years (1958–84) and published accounts of seven species over a period of 65 years from 1955 to 2020. He was an editor of the *New Phytologist* for over ten years (1964–75). His early plant specimens are in the Cambridge University herbarium and his meticulous later collections and detailed field notes are being deposited at the Royal Botanic Garden Edinburgh. He was the last ecologist to have demonstrated his

research in the field (exclusion of sheep in Padley Wood, Derbyshire) to Sir Arthur Tansley, the father of British plant ecology.

Donald possessed an extremely powerful intellect and a prodigious memory, and he was always very kind and generous in sharing his encyclopaedic knowledge and insights about plants and their ecology, taxonomy, and history. He was a superb lecturer and teacher and excelled at encouraging students and research associates. He had a remarkable eye in the field, and this led to several of his unique field experimental studies. He made many major contributions to our understanding of the British and Irish flora, including the climatic control on species distributions, plant-soil relationships, mapping distributions, vegetation of Upper Teesdale and the Peak District, soil development, plant geography, vegetation history and woodland dynamics. He was a truly great botanist, plant ecologist and taxonomist, colleague, teacher, mentor and friend.

Donald was devoted to his first wife Margaret (née Beatson, died 1981), their daughter Julia, and his second wife Sheila (née Megaw).

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H. John B. Birks