

Editorial

The British Lichen Society celebrated its fiftieth anniversary in 2008. However, although *The Lichenologist* was launched in the same year as the Society it has only now reached its fiftieth volume because the first few volumes spanned several years. To mark the publication of Volume 50 (Part 1) I thought that it would be of interest to look back at the authors who contributed to Volume 1 and to briefly consider the legacies that they have left to present day lichenology. The contributors to the first volume, listed in order of appearance together with the number of papers that they published in brackets, were as follows: J. H. Tallis (3), A. E. Wade (7), T. D. V. Swinscow (4), J. R. Laundon (2), P. W. James (4), J. L. Gilbert (1), G. D. Scott (2), R. B. Ivimey-Cook (1), F. H. Brightman (1), U. K. Duncan (1), K. A. Kershaw (2), D. C. Smith (1) and M. E. Hale (1).

Arthur Wade, Peter James, Jack Laundon and Mason Hale had curatorial and research roles in national museums. Arthur Wade (d. 1989) was a botanist at the National Museum of Wales from 1920–1961. In addition to his other botanical interests he was a passionate lichenologist and has been credited together with Ursula Duncan, F. A. Sowter and W. Watson, with keeping lichenology alive in Britain during the 1940s and 1950s. Peter James (d. 2014) co-edited *The Lichen Flora of Great Britain and Ireland* (1992) and *The Lichens of Great Britain and Ireland* (2009), and co-supervised the PhD programmes of A. Fletcher, D. L. Hawksworth, B. J. Coppins, O. W. Purvis and G. Kantvilas but unofficially co-supervised or extensively helped many other PhD students and lichenologists both in Britain and around the world. Jack Laundon (Natural History Museum, d. 2016) tackled some challenging lichen groups that received less attention from other taxonomists, most notably sterile

crusts. Peter and Jack were amongst the mainstays of the BLS during its early years with Peter editing *The Lichenologist* and Jack the *BLS Bulletin*. Mason Hale's (Smithsonian Institution, d. 1990) books *The Biology of Lichens* (first published 1967) and *How to Know the Lichens* (1969) were the principal texts on lichens for a period of time when detailed literature on the subject in English was thin on the ground. These individuals conducted research, published prolifically and enriched the collections of their institutions but equally important, they were mentors for several generations of lichenologists through their teaching on introductory courses and advanced workshops, and by checking identifications for others. Their lichen courses, usually run at field stations of one kind or another, provided inspiration for cohorts of lichen enthusiasts. I regard myself as one such beneficiary because my own first detailed grounding in lichenology was on a course run by Peter James at Chelsea Physic Gardens in London in 1969 which I attended while a student at London University.

Ursula Duncan, Dougal Swinscow and Frank Brightman were amateur lichenologists. Ursula Duncan (d. 1985) ran a family farm in Arbroath, Scotland, and was a gifted amateur botanist. She will be best remembered for her books for lichen identification, the most notable being *Introduction to British Lichens* (1970) which provided both novice and experienced lichenologists alike with a much needed, detailed but relatively user-friendly tool for naming all but the rarest lichens in Britain, and it was the foundation for the subsequent multi-authored 'floras' referred to above. Dougal Swinscow (d. 1992) was Deputy Editor of *The British Medical Journal* but researched and published on lichens in his spare time. He tackled what seemed to me at the time to be quite difficult groups of pyrenocarpous lichens, amongst

others, and contributed illustrations to Ursula Duncan's books. In his retirement he collaborated with Hildur Krog (University of Oslo) on the macrolichens of East Africa and the resulting publications remain among the authoritative works on the region. Frank Brightman (d. 1996) was a schoolmaster and later the Education Officer for the Natural History Museum. He was a staunch supporter of, and keen contributor to, BLS activities and co-authored the *Oxford Book of Flowerless Plants* (1966), providing a useful and well-illustrated beginner's guide to lichens. John Gilbert (Royal Botanic Gardens Kew, d. 1985) and Robert Ivimey-Cook (University of Exeter, d. 2017) were botanists with interests in diverse plant groups and their papers in Volume 1 are examples of their very occasional sojourns into lichenology.

Ken Kershaw, George Scott and David Smith were university staff with dedicated lichen research programmes. Ken Kershaw's (Imperial College and later McMaster University) principal research early in his career was on vascular plant ecology. Nevertheless, he co-authored and illustrated *The Observer's Book of Lichens* (first published 1963) and he also produced line drawings for both of Ursula Duncan's books. At Imperial College Ken befriended J. W. Millbank; he had been studying putative nitrogen fixation in fungi but then established that previous reports of fixation in fungi had been artefacts and that fungi don't 'fix'. With his research field having evaporated, John collaborated with Ken in producing what is still some of the definitive work on nitrogen fixation in lichens. After moving to Canada in c. 1970 Ken worked almost exclusively on lichen eco-physiology, especially in the Canadian far north, and he wrote *Physiological Ecology of Lichens* (1985). His PhD students included J. W. Sheard, D. W. Larson and D. S. Coxson, and I was privileged to have worked with him as a post-doctoral fellow. George Scott (University of Glasgow) showed that *Peltigera* species would grow readily under laboratory conditions and while this promising experimental system was briefly developed further by Kershaw and Millbank (*Lichenologist* 4: 214–217), and more recently Y. Gauslaa *et al.*

(*Lichenologist* 48: 305–310), it possibly remains to be fully exploited. George moved to the University of Salisbury, Rhodesia, and published *Plant Symbiosis* in 1969. David Smith was a PhD student of J. L. Harley at Oxford University. Jack Harley was a world authority on mycorrhizal symbioses; he had used radioisotopes (^{14}C and ^{32}P) and paper chromatography, then the cutting edge research tools, in experiments to demonstrate the bi-directional exchange of nutrients in ectomycorrhizas. David subsequently applied and further developed these techniques in experiments on lichens demonstrating a one-way flow of carbon from photobiont to fungus in a benchmark series of papers that have never been superseded. D. H. S. Richardson, D. J. Hill (currently an Editorial Board member), T. G. A. Green and R. A. Armstrong were among his PhD students and he co-authored *The Biology of Symbiosis* (1987).

John Tallis (then Aberystwyth University, latterly University of Manchester) has the honour of having published the first paper in *The Lichenologist*. He is best known as a quaternary ecologist with an interest in bryophytes. However, he and Ken Kershaw had been contemporaries as PhD students at the University of Bangor and perhaps an early mutual interest in lichens was nurtured between them during walks in Snowdonia. One of John's early PhD students was J. N. B. Bell (Imperial College), an expert on the effects of air pollution on plants, including lichens; one of John's latter PhD students was C. J. Ellis (Royal Botanic Garden Edinburgh) whose thesis was on *Racomitrium*. However, following a post-doctoral position with me, Chris Ellis pursued lichenology and is now a member of our Editorial Board.

The Lichenologist Vol. 1 is now an archive item consulted by few but the legacy of many of its authors, both in terms of published resources and the people that they trained, is still very much in evidence in the journal, and in the subject more broadly, to this day.

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Peter Crittenden