

Jean Paton MBE (b. 04.01.29)

Jean Paton needs no introduction to anyone with an interest in bryophytes – liverworts in particular of course. Jean celebrated her 80th birthday in January this year, and to mark this occasion, the Editor invited Jean to write a brief autobiography for *Field Bryology*.



△ Jean in the gardens at Caerhays, Cornwall, in June 2000.

I was 9 years old before I could read by myself, being mildly dyslexic and badly taught at five different schools. I spent 3 years as a student trying to catch up, and only just qualified for a BSc degree. Nevertheless, I suppose I was destined to be a botanist, and later a bryologist, wild flowers being my main love from a very early age. I taught myself to draw and paint them; then in 1944 my mother gave me Fritsch & Smith's *Illustrations of the British Flora*. In this I painted the flowers as I found them, a practice I continued in the four volumes of the *C.T.W. Flora of the British Isles Illustrations* until 1966. A wonderful way to learn plant names which was a great help when I became a student at Bedford College, London, in 1947.

I first became aware of mosses while still at school. We spent a family Christmas holiday on an estate near Machynlleth, and I was thrilled

to find several different, beautiful mosses on a woodland floor.

My next encounter was less promising. Professor Audus led a field course based in the Lake District in April 1949, mainly to study bryophytes. Discovering they also grew on walls and soil, I thought they were rather nasty, grubby things with impossible names. However, the following summer, as a vacation job, I assisted the Professor with his research. One day, when there was not much else to do, he gave me copies of 'Dixon' and 'Macvicar' and, pointing to some shoe boxes said '*those are the bryophytes collected in the Lake District – name them*'. After a bit of a struggle with the keys, I suddenly realized that this was fun, rather like following up clues in a detective story.

So it was that in the 1950 summer vacation I was ready to appreciate both the flowering plants and the bryophytes demonstrated by Francis Rose during the college field course based near Aviemore, and similarly during a Youth Hostel tour with two college friends to the Killin area and the north-west coast of Scotland. Some of the plants gathered that summer formed the basis of my bryophyte herbarium. Working in isolation, it was necessary to create my own collection, which was invaluable when I was preparing the liverwort book.

Expressing a wish to stay on at college for the necessary 2 years of research for an MSc degree, it was suggested that I should carry out some ecological studies and prepare a bryophyte flora of the sandstone rocks of Kent and Sussex. Too late I discovered that this involved taking a bicycle on the train to Tonbridge or Three Bridges at least once a week, and a great deal of cycling. This, in turn, led in 1954 to the first of many

bryological papers and notes published mostly in BBS journals. My personal copy of a fairly massive thesis was accepted by the University of Sussex Library in 1996.

At the same time I was encouraged to join the BBS and attended the weekend meeting in Oxford in 1951. During my research years I was privileged to be invited to join a small group of eminent bryologists, including Francis Rose, Ted Wallace and Peter Wanstall, who gathered for a number of Sunday excursions to various sites south of London. I was very grateful for so much extra bryological tuition.

In the summer of 1952 I began work as a research and herbarium assistant in the Southampton Botany Department. In the October of that year, Valentine 'Pat' Paton and I were married. My duties in the Department included helping students in the laboratory and on field excursions and courses. When Miss Loader retired from lecturing, I was asked to take her

▷ On Bodmin Moor in the early 1970s.



bryophyte lecture course for the next 2 years. She kindly gave me her copies of Macvicar and Dixon which I still treasure.

Naturally, I soon began searching for bryophytes in Hampshire, and Michael Proctor encouraged me to link my records to the National Grid system. Thus the 1961 flora of South Hants was the first vice-county bryophyte flora to be published based on 10-km grid squares.

During the BBS meeting based in Barnard Castle in 1958, 'Heff' Warburg and Alan Crundwell discussed how to share the work involved in preparing a moss flora of the British Isles. To my surprise, they suggested that I should acquire the necessary skill to illustrate their book, so I began teaching myself to prepare bryological illustrations. With Heff's untimely death in 1966, work on the moss book ceased until Tony Smith took up the challenge. His book was successfully published by CUP in 1978.

In 1959, Pat and I moved to Cornwall – a Mecca for botanists. I soon set about studying the flora, this time in both vice-counties. The semi-popular *Wild Flowers in Cornwall and the Isles of Scilly* (1968) and the slim *Flowers of the Cornish Coast* (1969) were published locally and enabled me to become a member of the West Country Writers' Association. A bryophyte flora of Cornwall was also published in 1969.

Herbaria representing all the bryophytes recorded in South Hants in the 1950s, and most of the bryophytes recorded recently in Cornwall, were accepted by the Druce Herbarium, University of Oxford. I left another collection of bryophytes at Southampton University, which was transferred to the Botany Department at Reading University in 1999. A number of island specimens were also deposited in the Isles of Scilly Museum.

The 2-week BBS meeting based in Ullapool in 1960 was a real introduction to the Scottish bryo-

flora; the huge number of species we saw was almost overwhelming. I shall always be grateful to Heff who encouraged me by making sure that I saw as many species as possible, both on this occasion, and again during the long meeting based in Braemar in 1964. The BBS mapping scheme was launched in 1960, and field record cards (that I had designed with help from the experts) were first used on the Sussex meeting in April 1961.

I was appointed Recorder for Hepatics in 1960 as neither Eustace Jones nor Jean Fitzgerald would take it on, but they willingly supported me when I needed help. They and other members of the BBS assisted me in the preparation of the fourth edition of the *Census Catalogue of British Hepatics*, published in 1965. Until I was relieved of the post in 1977, I checked hundreds of new vice-county record vouchers, but always had difficulty in getting anyone to check my own vouchers. I was also a long-serving referee for liverworts, which included over half the genera for many years until the load was gradually reduced. Both jobs gave me a wonderful opportunity to become familiar with a great many species.

Jack Gardiner, as long ago as 1965, had persuaded me to begin work on an up-to-date book on British liverworts. He then negotiated a contract with CUP for me which was eventually signed in 1969. In 1967, Paul Richards sponsored me for a 4-year grant-in-aid from the Royal Society towards the cost of studying liverworts in the field. I enjoyed the field work most of all and maintained that I could not write about species I had not seen growing. In any case, I needed living plants in order to study and illustrate oil-bodies in the leaf cells.

I was fortunate in being able to join so many of the BBS field meetings and was involved in organizing some of them, including the 1987 spring meeting in Penzance when we nearly



filled a helicopter to spend a rather expensive but happy day on Tresco in the Isles of Scilly, as well as the 2000 spring meeting based in Bude, which was also well-attended.

In different years I was invited to stay for a week by Mary Dalby in Ilkley, Ursula Duncan near Arbroath, and Archie Kenneth (and his wife) in Kintyre, who generously took me to their special bryological sites. Sometimes I went off exploring on my own; sometimes Pat accompanied me, especially in Ireland and in Scotland. On other non-BBS excursions I benefitted from the companionship of many members, including Joan Appleyard, George Argent, Agneta Burton, David Chamberlain, Martin Corley, Alan Crundwell, Mark Hill, Evelyn Loble, David Long, Roy Perry, Gordon Rothero, Alan Stirling, Tony Smith and Ray Woods. However, the most rewarding (and strenuous) excursion of all was with Jeff Duckett, Edward Little and a very young Peter Pitkin. We worked in areas around Killin, Glencoe, Strontian, Fort William and Carrbridge, en route to the 1968 BBS meetings based on Skye and in Dingwall, followed by a few days in Braemar.

△ Creag Meagaidh, Scotland, in July 1981. *From left to right:* Martin Crundell, Philip Lightowlers, David Long, Jean and Donal Synnot.

The Royal Society grant also enabled me to explore many regions of the British Isles which would not otherwise have been possible. Although always concentrating on liverworts, I also recorded at least the most easily recognized mosses and a few genera that interested me. This led to the publication of liverwort or bryophyte floras of Guernsey, the Isle of Man and Shetland, all published regionally.

Even before working on the liverwort book, I had described *Telaranea murphyae* and *Fissidens celticus* new to science, and added *Southbya tophacea* and *Lophocolea semeteres* to the British list. However, work on the book threw up a lot of taxonomic problems, some of which remained unresolved. Over the years I was able to describe *Fossombronia fimbriata*, *F. maritima* and *Plagiochila britannica*, as well as *Leiocolea fitzgeraldiae* with Roy Perry, and the moss *Ditrichum comubicum*, and added 10 more liverwort species to the British list, as well as *Lophozia personii* with John Birks.

Without any consultation or warning, CUP terminated my contract in 1979 and gave it to Tony Smith. I nearly gave up, but letters of support from several BBS members persuaded me to carry on. In any case, there was no point in wasting the accounts and drawings already more or less completed.

The book was in an advanced state of preparation, but I had had no success in finding a publisher. Then, in 1993, my luck turned when, after a gap of more than 30 years, I met Raymond Harley at the Spruce Conference in York. Having explained my problem, he told me to write to his brother, Basil, enquiring whether he would be interested in publishing my book. I received an encouraging letter from Basil. The following year he circulated sample pages and figures to professional bryologists. After receiving enthusiastic comments, he agreed to publish *The Liverwort Flora of the British Isles* and we signed a contract in 1995. What a relief!

Eventually the text was completed and all the figures were designed. Over the years, Pat spent hundreds of hours inking most of the figures and labelling all of them. The text was revised following critical appraisal by a team of readers. The typescript was then transferred to computer disc by David Holyoak, and everything was sent to Basil before the end of June 1998. This would never have been possible without so much help given by so many people. Publication was also assisted by grants towards the preparation of the text and production costs from the BBS and the six other organizations listed in the book, as well as a gift from a most generous friend.

I could not have had a better publisher. Basil was always willing to give help and advice on presentation, to give consideration to my suggestions on format, and allowed me to choose the photographs on the front cover from Harold Whitehouse's collection, and Christine Rieser's

photomicrograph on the back cover. Basil took immense trouble over the production of the book which was published in 1999. Only the binding proved to be too weak for such a hefty tome. The number of congratulatory letters received was overwhelming, and I was also very grateful for so many enthusiastic reviews. Prior to publication, I used get a steady trickle of gritty packets to name or check; this soon dwindled and I can only assume that the book really has been a help.

Since publication, several species have been added to the British list, and others are being or have been split up. Modern molecular phylogenetic studies have led to global revisions in classification as set out in the latest *Census Catalogue and Checklist*. The sequence of genera used in the liverwort book has been turned upside down and inside out, but most of the generic and specific names are unchanged so that the majority of these accounts and figures in the book remain viable, even when names have been changed.

My herbarium, heavily weighted in favour of liverworts, was accepted by the Royal Botanic Garden, Edinburgh in 1998.

I had a well-earned rest and a blitz on the neglected garden before I began researching and writing the text for *Magnolias in Cornish Gardens*. This consisted of over 100 plates of Pat's paintings of magnolias that were growing in gardens open to the public. Again, we were lucky with a local publisher. He spent a lot of time trying to make sure that the colours of the flowers were as near to the original as possible, although the printers were not always as clever. The book was published in A3 format in 2001, but has long been out of print.

We had visited the Isles of Scilly many times since 1962, either for short holidays or on day trips to Treco, sometimes with friends who had



△ Jean at Buckingham Palace in June 2003 after receiving her MBE.

come to stay with us, or with Gery and David Holyoak. The *Bryophyte Flora of the Isles of Scilly* (2005), written with and illustrated by David, resulted from a 2-week visit with the Holyoaks in 2003, joined by Bob Finch on the last 3 days. Here, we recorded bryophytes towards David's forthcoming tetrad bryophyte flora of Cornwall; however, I soon found I was becoming too old to go scrambling about amongst coastal rocks in order to access off-islands!

Unable to keep up in the field and not wishing to be a burden, I deeply regret not attending BBS field meetings since 2004. I have been able to help check other people's texts and, because of Pat's interest in old buildings, I have done some bryological recording in churchyards – not very exciting in Cornwall, and not many liverworts.

Over the years I have been privileged to receive so many rewards: Vice-President and President of BBS (1974–1977) – commented on by one member as '*much too young*'; BBS Honorary Member (1987); the Linnean Society Jill Smythies award 2000 for book illustrations (May 2000); and the International Association of Bryologists 2001 Sinske Hattori prize for best bryophyte publication in 1999–2000 (January 2002). I was appointed a Member of the Order of the British Empire (MBE) in the 2003 New Year Honours – this does not appeal to everyone but I am old-fashioned enough to be very proud of my MBE, and was glad that the then BBS President, David Long, was able to witness the ceremony at Buckingham Palace.

I have been so lucky and am so grateful for all the friendships, kindness, help and encouragement received throughout my bryological career. In return I can only hope that bryologists will continue to benefit from my contribution to their studies.

Jean Paton, Cornwall