

Obituaries

JOAN WENDOLINE CLARK (1908–1999)

Joan Clark (née Rust) passed away on 6 July 1999 at Fort William, Inverness-shire. She had lived in the area for some 60 years and was known and loved by all sectors of the wider community. During the last 25, she developed a deep interest in the botany of North-West Scotland and the Islands.

Joan was born on 6 October 1908 at Benholm, Kincardineshire, the only child of Wendoline and John Rust, City Architect of Aberdeen. Her father died when she was ten, and Joan and her mother went to live in Worthing, Sussex, to be near her mother's family. She continued her education in Worthing before going to a 'finishing' school in Switzerland. As a result she was good at languages, and on returning to England went to a college in Brighton to study French, German, and the traditional 'Shorthand and Typing'. After working in the Foreign Office in London, and in the British Embassy in Paris for two years she came back to London, where her Scottish roots surfaced and she joined the newly formed Scottish Nationalist Party. She was a staunch supporter of the SNP until her death, attending annual conventions almost without fail until 1998. In 1932, at the London meetings, she met Branch Secretary Alastair Clark, (a Glaswegian of Mull origins) who was to become her future husband; they were married in London in April 1935.

They moved to Glasgow where Alastair set up a fur-trading business but the outset of World War II in 1939 severely restricted his work. They decided to move north to Loch Leven where they bought and successfully ran the Loch Leven Hotel, a hostelry well-known by many a traveller botanist who had queued for the Ballachulish ferry! Here they were the ideal Highland hosts, making many life-long friends, both locally and from those who came to stay at the hotel during the next 19 years. After the untimely death of Alastair, in 1959, Joan sold the hotel and moved to a bungalow. Tigh Sòlais, built on nearby land they had owned.

I first met Joan in 1972 when she came to Kindrogan Field Centre to the first Sedges Course I had been asked to tutor. There were only four students: a very fit sixth-former preparing for university (with whom I just about coped), two 'B.S.B.I. Ladies' (who knew much more about sedges than I did!), and this quiet Scottish soul who had recently joined the Wild Flower Society and wanted the challenge of a critical group. Her advancement to Valhalla was being monitored by Mary MacCallum Webster (which Joan later admitted was a wonderful, albeit terrifying training) and Joan was determined to be a model student. We were two days into the course before she produced a walking stick and timorously admitted she was waiting for a hip replacement! I learnt afterwards that she thought I might send her straight home if it had been apparent from the outset.

When we came to a day walking up Lawers Burn, she struggled to the weir where we had lunch. I took her aside and said I felt she might find the scramble through deep heather and bog to the Yellow Corrie (then in the descending cloud) to see the *Carex microglochîn*, too much. I could see her disappointment but she, seeing my real concern, said "I will sit here, and will not move". The rest of us went on, and having found the species we had come to see and dropped back over the col to return to the Burn, through the mist Joan Clark appeared lifting one leg at a time over the deep sedge litter. I could not disappoint her again and we went up to see the 'new' species and joined the other three at the Burn for tea.

This determination to 'complete the course' and to do as good a job as she could was, I was to find out, the hallmark of Joan's contribution over the next 20 years to Scottish botany. She had 'graduated' from the W.F.S. with a sound understanding of Scottish wild flowers. As a W.F.S. 'interne' with 'Mary Mac', Joan had offered to type Mary's MS for the *Flora of Moray, Nairn & Easternness* (published in 1978). This took many weeks but Joan persevered, and learnt much from the exercise.

Joan joined the B.S.B.I. in 1977. She took full advantage of the Society's Specialists and soon realised the value of voucher specimens and pressed material for checking. Her eldest daughter Sine lived out in N. Uist, and Joan made regular visits to this land of low-altitude nutrient-rich

lochans and extensive coastline. With her own little Morris Minor and son-in-law Archie's boat, she covered the island. Water plants became a special interest and she sent much material to J. E. Dandy at the Natural History Museum. He was once chiding me for not taking the trouble to 'float out' a grass-leaved *Potamogeton*, saying there "were few botanists of the calibre of Joan Clark and Dorothy Cadbury, when it came to collecting pondweeds". As some will realise, this was indeed a great compliment to Joan.

With the pondweeds sorted out Joan took to other specialist collecting, sometimes ferns when we were looking for *Dryopteris expansa*, and then, in a big way, dandelions, where she again took great trouble in arranging the plants in the press and arranged her visits to be there in May. By this time she was in regular correspondence with the R.B.G. in Edinburgh and sent many herbarium specimens to the Scottish National Collections. *Rubus* and *Hieracium* were other genera that received her careful attention. Her fieldwork in Uist was further encouraged by Richard Pankhurst and others at the 'BM' when writing the *Flora of the Outer Hebrides* and her contribution was considerable.

When John Cannon relinquished the v.c. Recordership for Mull in 1978, Joan Clark took over v.c. 103. She took her stewardship seriously and made extensive annual visits. We encouraged her to maintain our mini-vice-counties as a recording base on Mull and she added many new records. She also took to recording plants of Coll and Tiree seriously, especially the former where she made several friends through her regular annual visits.

Although she was an Aberdonian Scot from the East, she took to the West and its islands with eagerness. Being naturally friendly she wanted to chat with people she met and in the Islands she realised this meant speaking Gaelic. She studied diligently and passed her O-grade. She quickly saw that vernacular Gaelic names given to plants varied from area to area and made a plan to collect these as widely as possible. Between 1975 and 1985 she circulated lists of what names were in the literature, asking for additional ones in use in her contacts' area. She was asked by Richard Pankhurst to provide names for the Hebridean *Flora* and she used her knowledge of Gaelic to coin names for taxa not in everyday use. For this she enlisted the help of another Uist man, Ian MacDonald (now Director of the Gaelic Books Council) and between them they came up with a definitive master list for all vascular plants growing in Scotland. This 20-year labour-of-love (*Gaelic Names of Plants - Ainmean Gaidhlig Lusan*, was finally published (at her own expense but with some help from the Gaelic Book Council and the B.S.B.I.); although Joan saw it all, including the coloured cover in final proof, in spite of all stops being pulled out by the printers it reached Tigh Sòlais seven days after her death.

Joan will be greatly missed by many in Lochaber. She was a devoted mother, grandmother and great-grandmother to Sine, Anna and Eilidh and their respective families. She was also a wonderful friend and correspondent to many a botanist who will mourn her passing and remember her with warm affection.

A. C. JERMY

DAVID EDWIN COOMBE M.A., Ph.D.

(1927–1999)

Dr David Coombe died in Cambridge on 28 June 1999. Although his name will be known to many B.S.B.I. members for his studies of the Lizard peninsula, and of the British and European species of *Trifolium*, few will be familiar with the wide range of his interests and the depth of the scholarship with which he pursued them.

David Coombe was born in Bath on 9 March 1927, the only child of Charles William and Phyllis Coombe (née Weaver). His father, a 'motor cycle specialist', ran a small workshop. He won a scholarship from South Twerton primary school to King Edward's Grammar School, Bath, and then went on to Christ's College, Cambridge, in 1945. After gaining a first-class degree and Ph.D., he worked in the Botany School, University of Cambridge, for the rest of his career, being appointed a University Demonstrator in 1952 and a University Lecturer in 1957. He was elected a Fellow of Christ's College in 1951 and subsequently served his college in many capacities, including Vice-Master. As a bachelor he was able to live in college rooms until he retired prematurely in 1989, after a prolonged period of ill-health.

Coombe's interest in the British flora developed at an early age. He was given his first *Flora*, Skene's *Flower Book for the Pocket*, on his 10th birthday. He was able to botanise in Dorset as

well as in his native Wiltshire in the 1930s, as at least 20 of his mother's relatives lived near Portland. "Several of the couples were childless," he recalled in 1991 in a letter to David Pearman, "and I was taken out in turn by these kind people on long summer holidays - with all sorts of rituals - the train from Easton to Sandsfoot, and a picnic at 'Vetch Corner' (where *Vicia bithynica*, *V. lutea* and *Lathyrus nissolia* have still been so abundant in recent years)." By 1939, aged 12, he was already noting pure and albino Stork's-bill, Sea Holly, Sea Samphire, Sea Purslane and the Shrubby Sea-blite at Small Mouth, as well as the abundance of butterflies, especially Painted Ladies, but this holiday was abruptly terminated on 27 August 1939 when all visitors were advised to leave Portland because of the imminence of war. In 1944 he started a detailed card index of the plants he had seen, but he was unable to find time to keep it up after his appointment to a teaching post in 1952.

Coombe's first botanical studies in Cambridge used analyses of plant growth to explain the distribution of species in the field. His Ph.D. thesis, *Plant Growth and Light in Woodlands* (1952), was supervised by Dr G. C. Evans. He used *Impatiens parviflora* as an experimental plant, solving the problem of germinating this awkward species and growing it in different light regimes at Madingley Wood near Cambridge. (The plants he grew spread and the species is now well naturalised in the wood.) Coombe and Evans developed the technique of measuring the complex light climate of woodland by hemispherical photography of the canopy. At first they used the camera with the original 'fish-eye' lens designed by Robin Hill, who lent it to them until commercial models became available. Coombe continued his work on plant growth after he became a University Demonstrator. Visits to Nigeria and the Cameroons led to studies of the tropical shrub *Trema guineensis* and the tree *Musanga cecropioides*, rapidly growing plants of abandoned farmland and forest clearings.

Even when he was working for his Ph.D. thesis he developed the interest in the Lizard peninsula which he retained throughout his life. His first trip to the Lizard was made with his parents in the spring of 1950. They had struggled to scrape together enough petrol coupons for the journey, and when they arrived at the rather squalid village round Lizard Green his mother burst into tears of disappointment. However they soon began to appreciate the scenery and botanical interest of the area. In June 1950 Coombe led the first of numerous Botany School excursions to the Lizard. Lewis Frost, then an undergraduate at Emmanuel College, joined this excursion and subsequently the two teamed up to study the flora and vegetation of the area. Later excursions included several held at Easter to study bryophytes, which were jointly led by Dr Harold Whitehouse.

It was on excursions to the Lizard that many students were introduced to Coombe's remarkable ability to synthesise knowledge from many different fields into a 'holistic' appreciation of the ecology of an area. His understanding of the Lizard was based on the critical interpretation of evidence from such diverse sources as Cornish place-names, Anglo-Saxon boundary charters, tithe redemption maps, the accounts of Victorian travellers, published tourist guides and the memories of the people of the Lizard themselves, as well as the more usual 'scientific' sources such as meteorological, geological and archaeological studies, aerial photography, botanical records and his own knowledge of the soils of the region and its vegetation at all seasons of the year. He developed an acute ability to 'read' a landscape. The detailed, long-term observations (including the repeated recording of permanent quadrats) carried out with Lewis Frost provided great insight into the ecological processes at work in the Lizard vegetation, and in particular the way in which rare species at the edge of their range were able to exploit small areas where the vigour of the dominant plants was reduced by different combinations of summer drought, winter flooding and human disturbance. All this information was committed to Coombe's prodigious memory, and could be recalled at will.

Coombe and Frost's first papers on the Lizard described the heathland vegetation in relation to the underlying soils. A crucial discovery was the fact that, whereas some of the heaths were rooted in soils derived directly from the underlying serpentine rock, the *Agrostis curtisii* heaths grew over wind-blown loess which had originated elsewhere. Although these papers were perhaps their most influential, a later paper by Coombe alone provides a greater insight into his approach to less strictly scientific subjects. In a bibliographic study of C. A. Johns' classic guide *A week at the Lizard*, he drew on a wide range of sources to clarify the complex publishing history of this work, which was incorrectly described in all the standard bibliographies and major library catalogues. These conclusions were not written up in a dry bibliographical paper but in a highly readable account full of detailed observations and spiced with humour.

To British botanists, the Lizard is famous for its rare annual *Trifolium* species, and Coombe and Frost were particularly interested in their population dynamics. It was while on fieldwork at the Lizard on 27 September 1957 that Coombe noticed a perennial clover which he described in his field notebook as "a thick leaved, \pm glaucous, hairy-petioled Trif. repens (collected)". This turned out to be a diploid species which he described as *Trifolium occidentale* in 1961. (His original intention to call it *T. atlanticum* was dropped when H. Gilbert Carter pointed out that strictly speaking this epithet applied to the Atlas Mountains.) Few British species can have been described with such a wealth of observational and experimental detail, and the paper is in effect a worked example of the biological species concept. Coombe got considerable satisfaction from the fact that botanists elsewhere in western Europe soon came to recognise *T. occidentale*, and those who knew it in the field had no difficulty in accepting it as a distinct species. (Many of its characters are lost in the herbarium.) He later prepared the account of the large genus *Trifolium* for *Flora Europaea*. It was characteristic of his approach that, rather than base his descriptions on published accounts or herbarium material, he grew as many species as possible at Cambridge from seed distributed by botanic gardens all over Europe (much of which turned out to be misidentified). As a result he was able to write an accurate account and a key that actually works. When I first visited the Lizard with David in September 1976, the clovers were germinating in abundance after the heavy rain which followed the droughts of 1975 and 1976. He was able to find all the rare and many commoner species, and to show me how to identify seedlings with only a single trifoliate leaf.

Coombe's field studies were usually backed up by the cultivation of plants in the Botanic Garden at Cambridge, many of them grown in the experimental glasshouses which he had helped to design. He developed methods of growing species such as *Isoetes hystrix* and *Ophioglossum lusitanicum*, and cultivated many dwarf or prostrate ecotypes from the exposed Cornish coasts. He took into cultivation all the surviving plants of *Juniperus communis* at the Lizard, rooting them from cuttings (an operation which required horticultural skill and great patience). This provided the basis of a public exhibit in the Botanic Garden where these plants were grown with progeny raised from seed from one of the Lizard plants and with other junipers from all over Britain. The differences between the columnar plants from southern England and the dwarf plants from Fair Isle (which Coombe likened to a Wilton carpet) were very striking, and the display had a great impact on visitors to the garden. *Erica* \times *williamsii*, the hybrid between *E. tetralix* and *E. vagans*, was another special interest. Coombe is the only person to have found more than one plant of this hybrid (only eleven have ever been discovered, all at the Lizard) and he grew all the surviving clones at Cambridge. These were introduced into commercial cultivation, one as cultivar 'David Coombe'. He also carried out a long series of experiments at the Garden on soil samples collected in the 1950s, which demonstrated the long dormancy of the seeds or spores of several rare or scarce species, including *Isoetes hystrix*, *Juncus capitatus*, *Juncus pygmaeus*, *Lythrum hyssopifolia*, *Riccia beyrichiana* and *R. crozalsii*. Unlike many botanists he was a good gardener, and he acted for some years as Hon. Garden Steward at Christ's, designing a garden which contained all the plants mentioned in Milton's poem *Lycidas*. His interest in garden plants led him to realise that *Limonium companyonis* (now *L. hyblaenum*), discovered at Rottingdean and originally reported as an "enigma of doubtful origins", was widely cultivated and almost certainly a garden escape in Britain.

Although Coombe did not find the East Anglian countryside as attractive as that of counties further south or west, he nevertheless acquired a detailed knowledge of the ecology of Wicken Fen, Breckland, the chalk grassland and woods of East Anglia and the Chilterns, to all of which he led student excursions in the Long Vacation. His approach to botany proved inspirational to many students. When he was in his prime his lectures to the Part II botany students were superb, and Peter Grubb remembers two absolutely outstanding formal papers to British Ecological Society meetings. After a day in the field, or a discussion in his college rooms, one left his company exhilarated by his insight into plant ecology. He influenced many who passed through Cambridge University in the period when the Botany School was one of the leading departments for whole-plant biology. One might have thought that as a "congenital conservative" (his words), and someone who could talk about his subject at great length, he might have seemed a remote figure to students, or even a bore. In fact he developed a great rapport with many students, and some have even commented that he was the one don they met during their time at Cambridge whom they really admired. They doubtless responded to his great enthusiasm and knowledge, his transparent integrity and his willingness to spend time with them. He also treated students as individuals and

was able to see good points in almost all of them. He responded very generously to requests for information from other botanists, professionals and amateurs alike. In many cases where he failed to respond to letters it was not because of any lack of desire to help, but because he started on a very detailed exposition of the subject in a letter which he was unable to find time to complete. He could, however, be scathing in his criticisms of professional botanists whose work did not measure up to his own standards.

Coombe applied the same academic rigour to all he undertook. He appeared to be incapable of considering anything superficially, and he usually seemed to be either an expert in a subject or completely ignorant of it. As a young lecturer he had been required to teach a wide-ranging introductory course to students, during which he had obtained a detailed knowledge of several cryptogamic groups, including algae and bryophytes. (In March 1958 Coombe and Whitehouse discovered the moss *Henediella stanfordensis*, new to Europe, on one of the Lizard bryophyte excursions.) Coombe had a very good command of German, having spent 3 months in Heidelberg as a research student, and he collaborated with Peter Bell on a translation of *Strasburger's textbook of botany*. To his botanical interests were added many others, including books (inevitably), English furniture and the visual arts. His tastes were traditional, and he responded particularly to authors like Thomas Hardy and painters like John Constable who shared his sense of place. As a relaxation he composed limericks and clerihews.

It was a matter of great regret to many of Dr Coombe's friends and colleagues that much of his work remained unpublished. They knew how great a contribution he was capable of making, and tried in vain to persuade him to write more. In his early career he published a series of excellent papers on diverse topics. Unfortunately his output then slowed, and he published little in the late 1960s and 1970s. The detailed *Biological Flora* accounts of the Lizard rarities which he planned to write, for example, were never completed, and his studies of the semi-natural vegetation and the crop yields on the patterned soils of Breckland were not written up for publication. No doubt his heavy teaching load, his service on innumerable college, university and other committees and his work as an editor of *Journal of Ecology* all contributed to this. The editorial work, in particular, made great demands on his time and energies as he was meticulous in his attention to detail and haunted by the prospect of misprints. His very appreciation of the interaction of factors which made him such an astute ecologist also appeared to make it difficult for him to pursue a single line through to publication. Added to this was an innate perfectionism: when I once encouraged him to prepare a *Biological Flora* account of *Juncus pygmaeus* he said he would not do so, as although it would be better than many accounts in the series it would not be as good as the best. However, none of these factors really seem to provide a sufficient explanation for his failure to publish more at the peak of his career.



David Coombe at Traunsee, Austria, 1 August 1956 (photo. taken by Dipl. Ing. B. Weinmeister on the 11th International Phytogeographical Excursion).

A more tangible impediment to Coombe's botanical work arose in 1978, when he developed a lung disease which was diagnosed as cancer. It was only after a major operation that it was recognised as a fungus (*Aspergillus*) infection. The adverse effects of this unnecessary operation remained with him for the rest of his life: in particular his right arm was often painful, especially in cold weather. In these later years he turned from his Cornish work to a series of studies of East Anglian topics. Although limited in breadth, these were all pursued with the same depth of scholarship. Several were written up for *Nature in Cambridgeshire*, where Gigi Crompton provided initial encouragement and Philip Oswald was a sympathetic 'midwife' and editor. Two of these papers resulted from his discovery of new populations of *Veronica spicata* on Newmarket Heath. This led him to a consideration of the lost chalk heaths of Cambridgeshire, which he reconstructed from the fragmentary surviving evidence. He also published a detailed paper on 'Milton's Mulberry' in his college magazine. This tree was said to have been planted at Christ's College by the poet when he was an undergraduate. Coombe not only demonstrated that it was almost certainly planted many years after Milton's death, but went on to develop a theory that many of the connections between great men and ancient trees were invented during the Romantic period. Sadly his health prevented him from writing up several of the topics he had been working on in this period - William Turner's Cambridgeshire plant records (which had been neglected by authors of successive Cambridgeshire Floras), the changing vegetation of Ringmere and the history of the Lombardy Poplar in Britain. The poplar paper would have been particularly interesting, as much of the evidence was drawn from landscape paintings, prints and literature references.

In the last years of his life Coombe's health deteriorated still further, and he was only rarely able to get into the field. He made his last two visits to the Lizard in 1994, to help survey populations of *Juncus capitatus* and *J. pygmaeus* for the *Red Data Book* and to follow up a developing interest in *Pyrus cordata*. In 1999 he learnt that he was suffering from Parkinson's disease and began to prepare for the inevitable disabilities it would bring. However in June 1999 he contracted a bacterial infection which failed to respond to treatment, and he died peacefully in hospital only a few days later.

David Coombe will be remembered as an ecologist with an unrivalled insight into the flora and vegetation of southern England. He left a substantial corpus of published work, all completed to his own high standards and some of it of outstanding merit. However, his major contribution perhaps lay in his teaching. By great good fortune one of his pupils was Oliver Rackham, who was thus introduced to historical ecology. Dr Rackham has developed and extended Coombe's approach and in numerous books and papers brought it to the attention of a wider audience. By this and other routes the holistic studies which Coombe pioneered came to influence an entire generation of ecologists, and to change the way in which we all look at the English countryside.

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OBITUARY NOTICES

An obituary appeared in *The Independent* newspaper on 30 July 1999 and further obituaries will be published in *Christ's College Magazine* and *Nature in Cambridgeshire*.

ACKNOWLEDGMENTS

I am very grateful to Mrs G. Crompton, Dr G. C. Evans, Lady Rosemary FitzGerald, Dr P. J. Grubb, P. H. Oswald, Mrs J. A. Paton, D. A. Pearman, Dr O. Rackham and the late Dr H. L. K. Whitehouse for help in preparing this obituary or for comments on a draft of the text.

C. D. PRESTON

LEWIS CHARLES FROST

(1926–1998)

Lewis Frost was very proud to have been born and bred in Norfolk and remained deeply attached to the county throughout his life even though in later life he rarely returned. He came from farming stock with a Belgian mother to whom he was very close. He was to have been called Louis but the Registrar disapproved of foreign names and wrote Lewis on the birth certificate. Hence, he was known as Louis to his family, as Lewis to most in the academic world, to those of us on more familiar terms as Lew and Uncle Lew to our children. At one time it was intended that he should enter the priesthood and whilst he continued his connection with the church during his early undergraduate days at Emmanuel College, Cambridge, it would seem that national service followed by his academic successes in the natural sciences tripos persuaded him to follow a scientific and academic career.

After attending school in Bungay he joined the Royal Army Educational Corps in 1944 and when he was demobbed in 1948 went up to Cambridge. His career in Cambridge was distinguished. He obtained First class in all three parts of the tripos and this led to starting a Ph.D in genetics in the school of agriculture in 1952 under the supervision of D. G. Catcheside. After one year he was appointed Demonstrator in Botany (a post he held until 1957); H. L. K. Whitehouse became his supervisor when Catcheside left Cambridge. His Ph.D was awarded in 1956. In October 1957 he was appointed Lecturer in Genetics within the Department of Botany at Bristol University.

In Bristol Lewis taught genetics to a wide variety of undergraduates. He was for many years the only genetics lecturer in the university, so he taught medical and veterinary students as well as biologists. He taught genetics until his retirement in 1983 with a further three years of part-time re-engagement. However, he also developed courses on nature conservation as his research interests in genetics waned and were overtaken by his deep commitment to conservation ecology. Indeed, Lewis will probably be remembered by most biologists not for his genetics teaching, but for his ecological and conservation activities primarily within two areas: the Avon Gorge and the Lizard in Cornwall.

In Cambridge Lewis had teamed up with David Coombe and together they developed an interest in the Lizard area of Cornwall; their joint work commenced whilst Lewis was still an undergraduate, during a field course led by David Coombe in June 1950. Lewis's passion for the Lizard (and the associated Cornish cream teas) lasted throughout the rest of his life and he would often visit the Lizard two or three times a year. In 1956 David Coombe and Lewis published their classic paper on the heaths of the Cornish serpentine - even today this is still regarded as the definitive paper and known to most ecologists as "Coombe & Frost". This was followed by another paper on the soils of the Lizard in which they made the startling discovery of wind blown deposits overlying the serpentine of the Goonhilly Downs. Today it is accepted that such loess deposits are wide-spread in the south west but at the time many treated the findings with scepticism. Lewis took groups of Bristol students to the Lizard to imbue in them his enthusiasm and idiosyncrasies. Those who attended these trips soon found themselves referred to as "Lizard kiddies". A favourite diversion was the grade one cream teas: these were taken at the farm on the main road to the Lizard where a side road is signposted to 'Grade 1'. A highlight of every visit to the Lizard was the systematic visitation of all the serpentine turners in the village and the bargaining with them for a few pence off the choice items of serpentine ornaments. Throughout his career Lewis was a great battler for conservation causes. He raised considerable funds for the Cornwall Wildlife Trust's purchase of land and establishment of a nature reserve on the Lizard and the Cornwall Wildlife Trust made him an honorary member. He inveigled, bullied, and persistently pestered the Nature Conservancy Council to do the same, with the result that eventually substantial areas of the Lizard became National Nature Reserves and Sites of Special Scientific Interest. In Bristol he set up the Lizard Appeal for funds to carry out research. This received good support and allowed numerous conservation and research projects to be undertaken, which are documented in a long series of over 20 Lizard Reports, and the engagement of a series of Ph.D students including John Hopkins, Marion Hughes and Andrew Byfield. His own research concentrated on the rarer plant species such as *Trifolium incarnatum* ssp. *molinerii* and in particular *Herniaria ciliolata* ssp. *ciliolata*.

During his early life in Bristol Lewis was a sub-warden in Wills Hall and he recognised the Avon Gorge as a vast untapped study area on the doorstep of Wills Hall. He quickly formed an informal field club and together with a trusty and dedicated group of students set about a wide range of botanical studies, including detailed examination of the ecology of species such as *Trinia glauca*, *Arabis scabra*, *Hornungia petraea* and *Carex humilis*. These interests culminated in the establishment of the Avon Gorge Appeal Fund, this attracted considerable sums of money and helped finance innumerable studies on the Avon Gorge and its rare plants, with Clive Lovatt and Libby Houston as collaborators. After his retirement Lewis remained as an Honorary Research Fellow in the School of Biological Sciences and continued producing research reports right up to the time of his going into hospital.

Locally Lewis played an active role in the early days with the Gloucestershire Wildlife Trust and took part in many of the early surveys of sites later to become nature reserves in that county. Another highlight was his long involvement with the Badgeworth Nature Reserve and the Adder's-tongue Spearwort. The fact that this reserve was officially declared the smallest nature reserve in the world and appeared as such in the Guinness Book of Records gave him great pleasure.

Most of us will remember Lewis for his dry sense of humour; even a few days before he died we were able to have a joke together and that impish glint came to his eyes. We will also remember the ways that Lewis always savoured a bargain. It gave him immense pleasure to be able to bargain a few pence off virtually any purchase from relatively expensive hi-fi equipment, to a new pair of shoes, even to a packet of biscuits. But this aspect of his character changed totally with friends and colleagues who were in trouble when he would be enormously generous, helpful and considerate. Those of us who were fortunate to experience this side of Lewis were indeed privileged.

M. H. MARTIN & M. D. AMES

Postscript: At the time of his death David Coombe was in the process of writing an obituary for Lewis Frost. Unfortunately due to his illness he did not manage to write this, but the authors are aware of how much more David would have included. We are however, very grateful to M.H.M. and M.D.A. for taking on the writing of the obituary in these circumstances. Ed.

HUGH ALLISON LANG
1920–1999

Dr Hugh Lang died on 19 November 1999 in Newton Stewart where he had been a much respected single-handed family doctor for 27 years. He joined the B.S.B.I. in 1973 although he had botanical interests going back many years. He was essentially a field botanist and very much an individualist who became well known to members of the society in Scotland, where he had served on the B.S.B.I. Committee. The late Olga Stewart described him in her "Flowering Plants of Kirkcudbrightshire" as a "mountaineer and mountain plant botanist" which summed up his love of wild and remote places and the plants which grew there. He was a large man who had great strength and stamina and enjoyed scrambling up to and exploring particularly inaccessible habitats and was an expert photographer who recorded most of his finds on film. He was also a keen observer of many aspects of the natural world and these included astronomy, geology and meteorology.

He was born in Sauchiehall Street, Glasgow and entered Glasgow University in 1937. After a science degree he obtained his medical degree in 1943 and immediately joined the airborne division of the Royal Army Medical Corps and was posted to India. He was one of the first doctors parachuted into the Japanese prisoner of war camps in Burma and saw at first hand the appalling condition of the Allied prisoners there. He was demobbed in 1947 and after entering General Practice in Stranraer and Barrhill, he eventually set up his own practice in Newton Stewart in 1958 helped by his wife Anne, whom he married in 1953. He was ideally suited to attending emergencies in the hills and put his organisational experience to good use, being instrumental in founding the Galloway Mountain Rescue Team and in 1975 becoming its first chairman. He was also a past president of the local Rotary Club. As a side line he made an impressive collection of aircraft wreckage collected from military jet crash sites. He retired from his practice in 1985.

Hugh knew the rocky coastline and hills of Galloway and the location of its botanical rarities better than anyone and was especially fond of the crags of the Merrick, the highest point in Southern Scotland. He told me how early on he had met the late Dr Humphrey Milne-Redhead, another doctor/botanist and vice-county recorder, and showed him a willow collected high in the hills. Humphrey pronounced it to be *Salix lapponum* (Downy Willow) an extremely rare plant of the district and was duly impressed. He exhorted Hugh to take his botany seriously and this paid off for in 1973 he added *Saxifraga oppositifolia* (Purple Saxifrage) to the flora of the Galloway hills; a third site for Southern Scotland. However, Hugh's great discovery had come previously in 1971 when exploring the remote hills of Easter Ross, he found *Artemisia norvegica* (Norwegian Mugwort) in a third British station. It is Hugh's photograph of this species which appears as the frontispiece in Ursula Duncan's "Flora of East Ross-shire". It is intriguing to note that it was Humphrey Milne-Redhead who found the second British site for this species in West Ross 17 years before. His enthusiasm was such that only a few months before his death he had managed to photograph *Arabis alpina* (Alpine Rock-cress) at its recently discovered second site in the Cuillins. Hugh served on the Torrs Warren reserve committee and was undertaking a photographic survey of this nationally important dune system. He also monitored the sole remaining colony of *Woodsia ilvensis* (Oblong Woodsia) in the Moffat Hills.

The arctic and the history of its exploration had always fascinated him and on retirement he was at last able to visit the high arctic regions of North America and particularly Greenland. He didn't miss a single summer visit in the 14 years between his retirement and death. His tiny blue tent was a constant feature of these expeditions and there was always speculation as to how he managed to fit his large frame into it. His ultra-long sturdy home-made trekking pole gave him extra stability especially when crossing glacial torrents. He had a very good eye for the small plants of the arctic flora and noted anything which looked unusual including the occasional lichen and fungus. His collecting was unorthodox but effective, using a notebook in his hip pocket and his collections were sent to the Botanical Museum of the University of Copenhagen and to Geoffrey Halliday at Lancaster University. It was from Hugh's high quality photograph of a *Pedicularis* sp. (a Lousewort) from north-western Greenland that Geoffrey identified *P. sudetica*, new to the Greenland flora. It had been collected previously, but was misidentified as the flower colour fades in the herbarium and it resembled a closely related species. He was delighted on his last expedition to see and photograph *Potentilla stipularis*, a very rare and elusive Siberian and Greenland species

of Cinquefoil. His archaeological interests were stimulated by ancient Eskimo remains and he was in correspondence with the Danish authorities about possible new sites. On expeditions Hugh was a steadfast companion who never let bad conditions get on top of him. He had an inexhaustible fund of verse and quotation to suit any situation and this was delivered in his own inimitable way. This was sure to 'break the ice' with strangers and boost flagging morale among friends. It was this same side of his personality that made his slide shows at the Scottish Exhibition meetings so memorable with descriptions which could reduce the audience to helpless laughter. He loved Drambuie and his ceremonial decanting from bottle to plastic container in the airport departure lounge to save weight, was a regular pre-expedition feature, causing many an eyebrow to be raised. He was a member of the Arctic Club and served on the committee of the Scottish Arctic Club.

He is survived by his son Angus. Sadly, his wife Anne predeceased him four years earlier.

R. W. M. CORNER

BERTRAM EVELYN SMYTHIES
(1912–1999)

Bertram Evelyn Smythies, usually known as Bill, died on 27 June 1999, aged 86. He had been a member of the B.S.B.I. since 1974 and was elected a Fellow of the Linnean Society in 1969.

Bill was born in India on 11 July 1912, at Naini Tal, Uttar Pradesh. His father worked for the Forest Service as the Assistant Conservator of Forests for the United Provinces and his mother was a noted tiger huntress. Thus, he was introduced to natural history at a very early age. He was sent to a preparatory school back in England at the age of eight, but during the holidays stayed with his grandfather (who had himself worked in India teaching botany at the Dehra Dun forest school) in North Devon.

Some years ago, Bill sent me a Christmas card by Elizabeth Twining, daughter of Richard Twining (tea merchant) and Elizabeth Smythies, illustrating the *Grossulariaceae*. He added the note that "My grandfather had the 2 vols of our ancestor's work in his library, and I used to lie on the floor and learn the names of the 'Natural Orders' by heart - no TV or even Radio in those days! Sadly the artistic gene was not passed to me, but Elizabeth Twining's work may have aroused my interest in bot. Ill., along with Fitch's line drawings in 'Bentham & Hooker'". It was no surprise that he went up to Balliol College, Oxford to read Botany and Forestry. It was here that he met G. K. Yates, a leading bird photographer, who taught Bill bird photography and how to prepare a bird skin. Bill went off camping and photographing rare birds at the nest in Caithness and Sutherland, skills he was to put to good use later.

After graduating, Bill went in 1934 to work for the Colonial Forest Service in Rangoon, Burma, where he was quickly recruited by H. C. Smith to collect bird skins for the British Museum (Natural History). This led to production of the *Birds of Burma*, published by the Mission Press, Rangoon, in 1941. Before leaving Burma in February 1942, Bill managed to rescue the copper printing blocks from the abandoned Mission Press and made possible the production of an enhanced second edition in 1953. Some copies of the original edition were sold to expatriate Europeans, but most were taken back to Japan where they were destroyed in an air raid: it is thus a sought-after rare work.

After the war, Bill returned to Burma, but left in 1948 when the country left the Commonwealth. He then took up a post in the forest service in Sarawak, publishing a 300-page *Annotated Checklist of the Birds of Borneo* in 1957. This was the foundation for his glorious *Birds of Borneo* (1960), a classic work that was later revised with a second edition in 1968 and a third in 1981. Although he also worked for a while in Brunei in the 1950s, he returned to Sarawak to produce *Sarawak Forest Trees*, published in 1965 by the Borneo Literature Bureau. It aimed to enable foresters to identify tree species and is a fundamental work for the new *Tree Flora of Sabah and Sarawak* currently being prepared.

In 1964 Bill married Jill Rogers and shortly afterwards retired from the Sarawak Forest Service to live in Estepona, southern Spain. It was here that he pursued his love of botany, taking part in some of the John Carr Expeditions to Andalucía. He travelled widely in the area and produced a *Flora of Spain: Checklist of Vascular Plants*, published in three parts (1984, 1984, 1986) as

volume three of the periodical *Englera* of the Botanischen Garten und Botanischen Museum Berlin-Dahlem. This phenomenal catalogue enumerates 7138 taxa compared to the 5948 in *Flora Europaea* (and an estimated 8600 in *Flora Iberica*) and illustrates Bill's industry. This increase was not achieved by simply taking a more radical view of species, but by a careful review of the extensive recent literature and consulting specialists.

However, it is not for this fundamental work that botanists most remember him, but for *Flowers of South-West Europe: a field guide*, a very successful popular botanical guide produced in collaboration with Oleg Polunin and published in 1973 by Oxford University Press. It is a credit to them that even today it is still also a best seller in its Spanish edition.

Part of the success is due to the clear, double-page spread line drawings of plants by Jill Smythies. Jill became a competent botanical artist as is also shown by her archive of drawings and paintings of Spanish plants presented after her death in 1994 by Bill to the University of Reading Herbarium. Following an accident to Jill's right hand which ended her drawing, Bill endowed the Linnean Society of London with the Jill Smythies award for botanical drawing which contributes to plant identification.

After moving back from Estepona to Surrey, Bill became a frequent visitor to the Linnean Society's rooms. Although always of few words, he was a good correspondent, and it was here that his wit and humour was seen: "In my grandfather's day, a century ago at Dehra Dun the mail was carried by a dak runner trotting along from village to village; for long distances horse transport was used. I suspect the Italian postal service is at the same state of development - your card postmarked Rome 9 Dec. took three weeks to get here. In the days of Imperial Rome it would surely have taken less!"

With Bill's death, the story does not end, for botanists will continue to benefit through the legacy of his library to the Linnean Society of London and the greater part of his estate to botanical charities.

S. L. JURY

ERIC VERNON WATSON

1914–1999

Dr Eric Watson, the distinguished bryologist and greatly respected university lecturer died at his home in Goring on 25 October 1999. He had been his usual self and working in the University during the summer. Although he found lately that he had been getting very tired, he had kept up his botany at home, almost to the last. He was diagnosed as having been suffering from leukaemia.

He joined the staff of the Department of Botany at the University of Reading in 1946 as Lecturer, later becoming Senior Lecturer before his retirement in 1979. He was very well known in bryophyte circles, especially for his books (*The Structure and Life of Bryophytes*, Hutchinson Universal Library, London, 3 eds and *British Mosses and Liverworts*, Cambridge University Press, 3 eds). These were particularly successful in getting students of all ages interested in and able to understand and know bryophytes. He had amassed a considerable bryophyte herbarium, putting specimens in both the University collection and his own private one (this is left to the Royal Botanic Garden, Edinburgh; the University of Edinburgh was his old *alma mater*). However, it must be said that in fact he was an excellent all-round botanist and knew the British flora well, having been a member of the B.S.B.I. for almost 50 years.

I remember vividly 'demonstrating' to students in his anatomy classes in the 1970s, when the class was expected to trace the vascular tissues through a plant node by making a series of sections and interpreting the results as a 3-D drawing. All the examples (*Vicia*, *Lamium* and strawberry runners) came from his garden. His teaching abilities were such that most students were inspired to work incredibly hard to do the most difficult example (*Vicia*, the stipules complicate the structure enormously).

His tutees were regularly invited out to his house for supper and a slide show. He held regular moss forays starting with morning coffee at his house and ending back for afternoon tea. These invariably started with the species to be found in the garden and over the years a considerable checklist of species was made. Generations of students will remember him with affection and many had kept in touch with him – he was a great letter writer.

Dr Watson was a keen natural historian, accomplished ornithologist (founder member of Reading Bird Club after the war), gardener, artist (watercolourist: he was a leading member of Reading Guild of Artists), golfer and earlier a very good tennis player. Taking part in so many local societies and activities made him well-known locally.

He will be greatly missed. We send his widow Joyce and family our condolences.

S. L. JURY