

Professor Ian Rorison



Ian Rorison died on 31st August 2008 aged 80 years. Ian was active in the affairs of the British Ecological Society over many years. He was an elected member of Council and later a Vice-President. He served on the editorial board of the *Journal of Ecology*, and was an editor of two symposium volumes, *Ecological Aspects of the Mineral Nutrition of Plants* and *Nitrogen as an Ecological Factor*. The first of these arose from a meeting held in the University of Sheffield in 1968 which had a far-reaching effect on the development of the subject. Ian was the organiser of the meeting and principal editor of the symposium volume. The meeting was ahead of its time in encouraging a multidisciplinary approach to this important field of study. Plant ecologists, soil scientists, biophysicists and plant physiologists contributed to lively discussions at the meeting, and the subsequent book stimulated much further research. It was also a valuable teaching tool, and battered volumes in university libraries and on the shelves of many of our older colleagues testify to its usefulness over many years. It was also among the most financially successful of the BES Symposium series.

Ian's research career began at the University of Oxford where his DPhil project continued an investigation into the calcicole-calcifuge problem begun by John Hope-Simpson under the supervision of Sir Arthur Tansley. Ian used sites on chalk and greensand to perform field experiments in which seeds of four species (two calcicoles and two calcifuges) were sown onto bare ground or into turf. Accompanying laboratory experiments examined the reasons for the failure of calcicoles to establish on acid greensand soils, identifying the importance of aluminium toxicity in this process. Much of this research was published in two landmark papers in the *Journal of Ecology*. After a short period at the University of Nottingham's Sutton Bonington campus, Ian moved to the University of Sheffield in 1961 to head the newly established Nature Conservancy Grassland Research Unit. From very modest beginnings, this rose under Ian's direction to become the world-famous NERC Unit of Comparative Plant Ecology.

As the UCPE grew, much of Ian's time was taken up with administration. He was aided in this for 20 years by Nuala Ruttle, his incomparable secretary, who had the rare ability to decipher Ian's ethereal handwriting. From the outside, and to some extent internally as well, Ian made running the UCPE appear effortless, which was sometimes far from the case. Despite this burden, Ian maintained his own research programme and also taught undergraduate courses in Sheffield, maintaining close links with the Botany (later the Plant Sciences, and later still the Animal and Plant Sciences) department.

Ian published on a variety of topics closely related to the calcicole-calcifuge problem, including phosphorus utilization, the importance of the predominant forms of nitrogen available to plants in acidic and calcareous soils, and the interactions between nitrogen supply and aluminium toxicity. Ian was one of the pioneers of attempts to isolate and understand the interacting chemical, physical or biological influences on plant performance and survival. He identified experimental sites such as the north- and south-facing slopes of Lathkill Dale in the Peak District that provided sharply contrasting environmental challenges to vegetation. He devised the now widely used Rorison's solution to optimise nutrient supply for the growth of non-crop species in hydroponic systems. Early in the life of the UCPE, Ian designed and built plant growth rooms which were invaluable to researchers in the Unit and in the Botany Department for controlled environment experimentation, and which were forerunners of Sheffield's latest state-of-the-art facilities.

It could be argued, however, that Ian's greatest legacy to ecology will be his liberal, 28-year-long directorship of the UCPE and the adroitness with which he successfully navigated the Unit from one five-year funding round to the next. Under his leadership, the undisputed talents of his colleagues Philip Grime, Rod Hunt, John Hodgson, the late Philip Lloyd, George Hendry, Ken Thompson and others, established and flourished in their individual ways. This formidable team made (and, especially in the person of Phil Grime, continues to make) major contributions to

our understanding of the fundamentals of plant ecology. As Ian wrote in his foreword to the UCPE's Silver Jubilee Symposium published in *New Phytologist* (1987), 'We have always worked on the premise that, if you understand the fundamentals first, you can then apply them to problems both seen and unforeseen.'

In the parlance of modern ecology, Ian was more of a scientific facilitator than a competitor. The opposite of dogmatic, Ian's approach to science was based on empiricism, experience, an eye for detail, and a belief in the need to do things as simply, but as robustly, as possible, without losing sight of the complexity of the natural world. He inculcated his research students in this philosophy without expecting them to adopt it slavishly. By a series of gentle nudges and reminders, a student would be guided along a profitable path, even if it was one that Ian himself might not have taken.

Ian was friendly and approachable and a very popular member of the academic community in Sheffield. He was disarmingly modest and courteous, his dry wit always close to the surface. He had wide cultural interests including in music and the arts, which made him an interesting and convivial companion. He freely gave his time to help colleagues and students, and he and his wife Monica were generous in their hospitality to them and to visitors to Sheffield over many years.

Ian retired in 1989. Until illness intervened, he delighted in touring Britain and the rest of Europe. While Monica explored archaeological sites, Ian, from a nearby café table, would indulge a characteristic interest, 'investigating the local flora and fauna using plate and glass techniques.' Ian and Monica were married for over 50 years. Our deepest sympathy goes to her and to the rest of their family.

John Lee and David Robinson

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