

## Presidential Address, 1980

GENTLEMEN AND PLAYERS

R. W. DAVID

I must begin this address by once again expressing my sense of obligation to members of the Botanical Society of the British Isles, as well as my surprise, that they should have elected me to the Presidency of the Society. One has only to look at the list of our past Presidents to become immediately aware of how great an honour this office represents. To pick out a number of individual names would be invidious. We may, however, note that, among professional botanists, of the three authors of the first serious Flora of the British Isles to appear for a hundred years, two, T. G. T. and E. F. W., have served us as President; while the senior editor of the Flora that looks likely to stand next to it on the shelves is my immediate predecessor, Professor D. H. Valentine. Alternating with these illustrious professionals have been those amateur botanists who have had a national, and sometimes an international reputation – men such as G. C. Druce and J. E. Lousley. To these two names I should like to add one other who is, to all our satisfactions, still extremely active: John Dony, who alone has fathered two county Floras and, I suspect, godfathered a great many more.

I have mentioned the alternation of professional and amateur botanists as Presidents of the B.S.B.I. This has become, since the last war, a tradition in our Society, appears to be particular to it, and is, I believe, a symptom and symbol of its special nature and aims. It is this feature and this special nature that I want to examine today, and all the more because there have been signs that some of our members have begun to doubt whether, under modern conditions, it is still possible for professional and amateur to have a common botanical interest. Fifty or a hundred years ago, say these doubters, it was the amateur botanists who in England, and perhaps in some other European countries, were enlarging the boundaries of botanical knowledge. And certainly the roll of honour (which becomes so familiar to anyone regularly reading the signatures on papers, determinations, herbarium labels, and those enchanting (and revealing) discussions in the Exchange Club distributor's annual reports) is rich in amateurs. There are those who seemingly trudged all over Britain to the most inaccessible places, and hardly ever missed a plant: the two Lintons, Augustine Ley, and my particular hero E. S. Marshall, in whose footsteps I have lately found myself regularly following and whose specimens are always so perfectly mounted, his opinions so clear and sensible, and his directions (written in that beautifully neat yet lively hand) so abnormally intelligible and accurate. Then there are the monographers of critical groups: Pugsley on *Euphrasia* and *Fumaria*, Kükenthal on *Carex*. Today, however, or so it has seemed to many, the application to botany of research techniques only to be learnt by those in professional training, and of scientific apparatus only available in the more affluent laboratories, has made it impossible for the amateur to play a comparable part. How many amateurs have access to an electron microscope, or to the chemical equipment necessary for sophisticated soil-sampling? How many could manipulate advanced mathematical formulae, or even prepare a squash for the microscope, let alone count the chromosomes in it? Worse still, the amateur has difficulty even in understanding what the professional is saying and doing. To many, the more elaborate papers in recent editions of *Watsonia* hardly seem to be about plants at all, or at least not about plants as they themselves know them. Do professional and amateur any longer speak the same language? Do they have any common ground? Are gentlemen and players still playing in the same match?

One comparatively recent development I find very reassuring, and that is the increasing emphasis, among professionals, on what I may broadly term ecology. 'Ecology' means, in rough translation, the home-life of a plant; that is, the plant alive and at home, its habits, its diet, the company it keeps. These are the things – the living plant and its home – that matter to the amateur botanist. Indeed I sometimes suspect that the home may matter as much as or more than the plant, for one thing that makes the

amateur take to botanising is that attractive plants so often grow in attractive places. (I know that I can hardly ascribe that motive to the increasing number of us whose greatest pleasure is raking over rubbish-dumps, but it is still true, I think, of the majority). It is, predominantly, in the field that the amateur works and the growing plant that he studies. He acquires an eye for country, and can spot, a mile off and more, what will be a good place for plants or the only possible place for a particular plant. He acquires an eye also for the characteristic stance of a plant; what another of my distinguished predecessors, David McClintock, borrowing the term I believe from aircraft recognition, calls its 'jizz'. All amateurs know that every plant has got its jizz, which may be a shape, or a trick of growth, or a peculiarity of colour or texture. These peculiarities almost wholly disappear in the dried and mounted specimen, however well it is mounted. They cannot be exactly measured and are extremely hard to describe with any precision. Yet experience will programme them securely into the computer that is the human brain, and when next the plant is presented to the same observer his brain will furnish a determination that is much more certain, though much less demonstrable, than one obtained from any key or written diagnosis. Whenever one does meet with that sort of recognition in botanical literature – and it is extremely rare to do so – how refreshing it is! Another of my heroes is the Alsatian, Dr F. W. Schultz. The work of Schultz with which I am most familiar, his papers on the *Carex muricata* aggregate, were written in about 1870, when he was old and ill. He rambles, and there is little order in his observations. He wasn't very clever with nomenclature, and almost all his names have turned out to be illegitimate, or nude, or invalid. Yet when he tells how the stands of his *Carex leersii* could be picked out from the neighbouring *Carex spicata* on account of their greyer, more matt appearance, and instantly picked out even by the 'Nichtbotaniker', the non-botanist who accompanied him on his expedition, then I stand up and cheer. You won't find such details in any textbook description. You would, indeed, find it very difficult to formulate them at all succinctly, and if you succeeded, nine out of ten botanical editors would cut them out with the comment 'this is fancy – we want measurements'.

I am, as you see, suggesting that this kind of perception is something that the amateur botanist is in a particularly good position to cultivate, and that he often cultivates it to a very high degree. I am also insisting that, although it is often neglected or discounted, because of the impossibility of exactly defining or quantifying its observations, it is an extremely valuable instrument. It would of course be very naive to suppose that professionals do not also possess it. We may occasionally be tempted to imagine an era when the professional botanists spent their time poring over herbarium sheets (and, oh!, what a hash some of them made of them!) while the amateurs roamed the fields. That time and that distinction, if they ever existed, are long since past. Anyone who has had the privilege of watching such a professional as Clive Jermy at work in the field will witness that he is not only acutely aware of the jizz of his plants but can give reasoned explanations for each quirk of appearance or behaviour. Yet I would still maintain that the way of looking at plants that I have been trying to describe comes more naturally to the amateur, because his view of plants is more open, less circumscribed by the requirements of a particular research programme. All plants are to him objects of wonder, and the amount of attention that he gives to each is solely determined by his appetite.

Now if I am right that the amateur has, or could have, a particular contribution to make to botanical study, and that this contribution is particularly valuable, how can he best make that contribution under present conditions of ever-increasing specialisation and sophistication? If I am to attempt to answer that question I must come down from my theoretical clouds and go into detail and illustration. These I can only produce from my own personal experience, and I must therefore beg your indulgence for a certain amount of autobiography, and particularly (since the group of plants of which I have most experience is by many considered a dull one) I must apologise for a certain amount of Caricology. And while I am apologising I must add that some of the opinions that I shall now voice are very much personal and not at all Presidential. If any of you should find them offensive to your own susceptibilities, please remember that they are anything but official, and that the last thing I want to do is to give offence – only stimulate, which is sometimes best achieved by a little exaggeration.

I want to use my own experience to illustrate the nature of the amateur botanist and some of the possible stages in his development. As Dr Walters has reported in a very indulgent note in *B.S.B.I. News*, I came to botany through my mother. She was a keen, but almost wholly untrained, amateur who belonged to an age when young ladies celebrated the finding of a plant by what was known as 'painting in', or more properly painting over its portrait in the volume of illustrations that accompanied Bentham and Hooker's *Flora*. On my fourth birthday I was given a copy of that book and a box of water-colours, and that spring my mother, with very limited assistance from myself, painted in for me

the daisy and the dandelion. I am not ashamed to say that I kept up this practice until all the illustrations in the book, except for the fourteen extinctions, had been coloured; or that I later acquired Butcher and Strudwick and 'did' them too. This activity has some advantages as well as enormous disadvantages. It does quickly familiarise one with the main characters of the different families of flowering plants. The need to copy makes one at least look at each plant, and the result can, very occasionally, have a scientific use. From my Bentham and Hooker I was able to prove that the *Veronica* I found in Cornwall in the twenties was not *V. anagallis-aquatica* but *V. catenata*, because I had painted its face pink and not blue. And my poor mother's firm belief that as a girl in Skye she had been shown *Pinguicula alpina* was disproved (though I never told her so) by her own book, which showed the mauve flowers of *P. lusitanica* and not the white of *P. alpina*. On the other hand Bentham and Hooker, besides being appallingly uncritical, bred in its users, or at any rate in its colourists, an ambition that I now regard as extremely unhealthy – the passionate desire to see every plant native to Britain. This desire is, fortunately, unrealisable. The list is not, as Bentham and Hooker might suggest, finite, and new plants are continually being discovered – or invented. My little dandelion has been fractured into a hundred or two microspecies and I am certainly not going to start painting *them*. Fortunately I had realised, even before dandelions were split, that the task I had set myself was as dreary and unprofitable as that of the giant who has to bale out the allegedly bottomless Dozmary Pool, using only a limpet-shell with a hole in it. I still blush to remember the silly escapades in which it involved me, the wild dashes to 'see' a new plant with no time to look at it properly when I 'saw' it. Obviously, if my botanising was not to be wholly superficial, it had got to be practised more deeply, and therefore less widely, than I had been practising it. Some form of specialisation was indicated.

My first narrowing of the field took the form of localisation. My family had long had a house in Cornwall where all our holidays were spent, and in the mid 1950s I became the Society's recorder for E. Cornwall, v. c. 2. This was of course the period when the mapping scheme was getting under way, and a happy time I had of it, often collaborating with Oleg Polunin, my opposite number in W. Cornwall, v. c. 1. However, square-bashing is not all that great an improvement on plant-chasing. True, one is then concerned not with the single plant in total isolation but with the distribution of a species, perhaps even with its associations with others. But this study can remain extremely superficial. Many of my Cornish records were made driving a car along country lanes, with my brother sitting beside me and crossing off on the recording card the names that I called out to him as I drove. Let me here introduce two of my heretical opinions; the first being that, what I may irreverently call the 'Woof' technique (how many different plants can I tick off in a day or a month or a year), is sometimes useful enough while we are serving our apprenticeship to botany, but is one that we ought to outgrow. My second doubt is about grid-square recording and especially tetrad recording. Mind you, the making of the *Atlas* was a pricelessly valuable enterprise, providing an essential basis for almost all botanical investigation in Britain; and it is true that recording by tetrad does thicken up this basic knowledge, indicating, for example, whether a dot in a ten-kilometre square represents a single casual plant or a number of colonies. All too often, however, the tick that signifies the presence of a plant in a tetrad is all that the observer has recorded about it. If we botanists are to be something more than chasers or tickers we must again narrow and deepen our study.

Now, I am not for one moment denying that field records provide invaluable and often *the* essential data for all sorts of investigations, or that the collection of field records is an operation for which the amateur botanist is, or can be, particularly well fitted. That, indeed, is the very burden of my song. What I am saying is that, if our records are to be of real value and if their collection is to continue to give us full satisfaction, we must be stricter in asking ourselves 'what kind of record is worth making?' Now that we have the framework of information in the *Atlas*, I suggest that it is no longer enough to know that a particular plant can be found in a particular square. We ought now to be addressing ourselves to the question of why is it there, how long has it been there, and perhaps even how long it is likely to remain there? This means taking at least as much interest in the habitat as in the plant. Probably it means shifting our emphasis from plant-recording to what may be called site-or habitat-recording.

Two developments are likely to urge us further in this direction. The first is the increased concern for conservation. Anyone who has been in the least involved in conservation knows that it is an operation requiring not just a *laissez-faire* policy but extremely vigorous action. There is in Cambridge a churchyard with a surprising flora including several rather unusual plants. The two ladies who have assumed the guardianship of this little Eden were recently outraged at finding another neighbour weeding and pruning in it. But the weeder and pruner was right and the good ladies wrong:

conservation does not mean abstaining from all intervention and trusting that a beneficent Nature will look after herself. She will; but often not in the way that we should prefer, as is well illustrated by what happened when the rabbits, those excellent managers of certain habitats, were wiped out by myxomatosis. In Cornwall what were to us charming dells full of primroses and uncommon ferns are now impenetrable and almost ineradicable thickets of that more aggressive competitor, the blackthorn.

Conservation, that is the maintenance of what we may regard as the ideal plant community for a particular locality, means continuous and laborious management, and this, to be successful, must be guided by reasonably exact knowledge: first, of what *is* the ideal community, and second, how its individual members will react to particular stimuli. Some of the necessary information will be derived from laboratory experiments, some from growing tests in botanic gardens, but much of it comes, and must continue to come, from records. We have today an institution, the Nature Conservancy Council, expressly charged with acquiring that knowledge and, in its light, selecting and managing the sites that, in the national interest, are to be conserved. The Council is, I believe, by far the greatest user of the Biological Records Centre at Monks Wood; but the bare information that a particular species occurs in a particular tetrad does not do much to further the Council's objects. For though the Council will certainly assist in protecting an endangered rarity, what it is primarily concerned with is the preservation not of particular plants but of particularly rich or particularly characteristic habitats. It needs the data that will enable it to identify these habitats, or that can warn that a particular wood, marsh, or meadow under threat has a special value, in which the presence of a rarity is only one factor.

The second development to which I have referred is the extraordinary and ever-growing sophistication of information retrieval systems. The modern computer can not only store an almost infinite number of facts and, when required, re-present them almost instantaneously; it can also assemble, compare, and analyse the data that it holds in ways that would be too complicated and time-consuming for what I may call the 'steam' investigator. These remarkable capabilities have excited botanical research-workers, who are beginning to dream of all sorts of earth-shaking discoveries that might be made by setting the computer to work combining and recombining all the collected data. The dream is fair enough, but the dreamers, it seems to me, sometimes forget that however sophisticated the analysis the results will be only as good as the original data. Indeed, if that is incomplete or inaccurate the more sophisticated the analysis the more misleading will be the results.

Let me illustrate the present difficulties of both the Nature Conservancy Council and the research scientists. If every plant record that any of us had ever contributed contained an 8-figure grid reference, the conservator wishing to assess the quality of a certain site or the scientist wishing to correlate the plants of a certain habitat with other factors (climate or soil character or insect life) would merely ask the computer to print out the list of all the plants with that particular grid reference. But it is only the rarer plants for which we bother to write out individual record cards, and even then we often do not put in the full reference. The great majority of our records are on composite field cards, and refer to a 10 kilometre square or at best to a tetrad. These are invaluable in giving a very general overall picture of a plant's distribution, more comprehensive and more readily comprehensible than was available to earlier generations, but useless to the investigator who wants to go deeper. When the computer prints out for him the plants recorded for his reference point, all he will get will be the rarer plants, which will give him only the vaguest indication of the nature and quality of his site, and may be positively misleading when it comes to any attempt at analysis or correlation.

Now it would be absurd to expect our members to record, individually and with an 8-figure grid-reference, every common plant that they see, down to '*Belli per*' and '*Veron hed*'. I do it for sedges, even for *Carex nigra*, but there are only 76 of them in Britain and even so it is an awful chore which I am constantly resolving to abandon. How else can we provide plant records that offer a more realistic, because less selective, account of the plant coverage? I think it can only be by concentrating more on particular sites or habitats. Rather than as it were entering the competition for the maximum number of different plants we can find in a purely arbitrary area, be it one square kilometre or one hundred square kilometres of undifferentiated ground, I should like us, in the light of the results of our previous square-bashing, to proceed now to pick out, in our district or vice-county, those sites likely to be of particular interest botanically. There will be copses, little areas of marsh, outcrops of limestone or of sand, disused quarries and corners of fields used as stackyards; and each of you will think of many more special preserves of this kind. These should be intensively examined and all plants recorded, with of course the full grid reference for the spot and as complete an indication as may be possible of the peculiar nature of the habitat. Such an activity would, I believe, give infinitely more satisfaction than

any chasing or ticking, and this satisfaction would include the knowledge that our work was going to be of real use to others—that we, non-professionals though we may be, were making an effective contribution to botanical research.

Having pleaded for an improvement in the quality of plant-records submitted, I must say something about what happens to them at the receiving end. Many of us have been anxious about the state of the Biological Records Centre at Monks Wood since Frank Perring left it. The Institute of Terrestrial Ecology, the organisation that has charge of the Centre, has admitted that the records are in something of a mess. The reason for this is a perfectly valid one, and may even be considered creditable. When the mapping scheme was first set up, the system chosen for recording and then representing the data in printed form was a comparatively cheap and simple one. There was every good reason for this. It was vital to get some positive results, and to get them early. If more complicated equipment had been selected, the enterprise might have dragged on without any conclusion in sight, while everybody's enthusiasm drained away; and if more expensive equipment had been chosen this pioneer operation could probably not have been funded at all. But in an age of invention, cheap and simple tends to become quickly obsolete. In time it became clearly essential to introduce a more sophisticated system. Here, perhaps, a mistake was made and the pace of change underestimated. Instead of moving at once to full computerisation (and some of us have painful experience of how shattering that move can be), an intermediate system was chosen. All too soon, however, and before the records in the first system had been fully transferred to the second, it was realised that, if the data were to be readily available and fully used, only the most advanced equipment would serve. This is now installed and in operation; but the records in not one but both the two earlier systems, both incompatible with the new, have to be manually translated into the new terms. This is bound to be a long process, but it is progressing steadily. B.S.B.I. representatives, in several very helpful meetings with senior officers of both the Institute of Terrestrial Ecology and the Nature Conservancy Council, have been assured that the Institute puts the highest value on its biological records, will make vigorous efforts to bring them back into order in reasonable time, and will so staff the Centre that the records can be maintained in that condition. The Society is now discussing with the Institute and with the Conservancy Council how we can best help to increase and improve the input. We hope shortly to put forward proposals for what I believe will be a simpler and more certain system for the organisation of recording and for communication between our local recorders and the Biological Records Centre. Our Records Committee must be deeply involved in the detailed planning; an early task will be to devise a record card that, while encouraging the submission of more ecological information about the plants recorded, is not dauntingly complicated. Having been close to despair, I now find the prospect extremely encouraging, and am confident that a new and fruitful era of recording will soon be initiated.

Not only is it desirable that we should make our plant records more comprehensive, we must also make them more accurate. We are used to making fun of the phrase 'I've seen it in print, so it must be true', yet in practice we too often seem to accept it at its face value. I have actually heard people say 'but there is a dot in the *Atlas*, the record must be correct'. Would that it were so; but unfortunately recorders, editors, and even printers, are all fallible. And here I want to make a special plea to amateur members of this Society. The joy of discovery is very great, so great that there is a risk that we come to regard our discoveries as something intensely personal. We may be reluctant to share them, jealous of anyone else who claims them as his own, and bitterly resentful if they are questioned. But science, of which botany is a part, is very much a public activity. It is central to the whole concept and ethos of science that an investigator's findings should be published, should be scrutinised by his peers, and should not be admitted as part of the common store of knowledge until, and unless, accepted by a consensus of scientific opinion. If we are to be anything more than *dilettanti* we must conform to that ethos.

Where plant records are concerned, there is, I know, the vexed question of secrecy. This is not the place to discuss the pros and cons of keeping secret the location of a rare plant. In each case there are many and various considerations to be weighed. With the exception of orchids, that curious family that seems to inspire so many evil temptations (I am sure that the Tree of Knowledge was an uncharacteristically shrubby member of the Orchidaceae), my own view is that more plants have been lost through excessive secrecy than through too wide a publication of their whereabouts. Be that as it may, my general point here is that we should rather welcome our discoveries and determinations being questioned (and, one hopes, confirmed) than seek to keep them private, which means that they can never have more than a purely personal value. And if any fear the shame of having a determination

contradicted, let them examine any major herbarium. They will find that there is no botanical authority, however august, who has not been guilty of the grossest errors.

Lest this sounds superior and condescending let me at once confess that my own errors have been innumerable and awful. I will relate one of them, because the relation may clear me of the suspicion of being superior, because I think that the incident is instructive, and because I have here an opportunity to catch the error before it breeds. For errors are like mink or coypu: once loose upon the world they multiply, they do enormous damage, and they are almost impossible to exterminate. In my third and last botanical avatar I have tried to cultivate a much deeper knowledge of a much narrowed field: the sedges. The first sedge whose British distribution I studied was *Carex montana*, to which I was drawn because that distribution is so odd. Where it occurs it is usually in millions, but when you reach the boundary of such a massed colony you will find that it ceases abruptly and you may not come on the plant again for a hundred miles. Hanbury and Marshall's *Flora of Kent* lists *Carex montana* for that county; and in going through the British Museum covers I lighted upon the voucher specimens for this record—four tufts mounted at the bottom of a composite sheet and labelled 'Bysing and Thornden Woods, September 1875'. *Carex montana* is an early-flowering sedge and because these specimens were collected so late they were completely without flowering stems. Yet three of them had the woody rhizomes, bristly with old leaves and with a strong tinge of crimson, which are taken to be characteristic of this species. I therefore republished the record in my Short Note in *Watsonia*. Inspired by this, the Kent Field Club mounted an expedition to Bysing Wood, and in time I was sent a series of flowering stems from hopeful collectors. All but one of these were obviously the related *C. pilulifera*, but one, very dark with large pear-shaped utricles, was so promising that, although it was then August, I myself dashed off to the wood where, among abundant *C. pilulifera*, I stumbled almost at once upon two large tussocks that seemed to me to have most of the right characters for *C. montana*. The flowering stems were pretty bedraggled, the basal sheaths not quite so red as I would have liked, but I showed specimens to a colleague and we agreed that *on balance* the plants could only be *C. montana*. I so informed the Kent Field Club. A note was published in their *Bulletin*, and I undertook the following season to lead a search to discover just how widely the plant was spread. Arriving early at the rendezvous, for a check-up, I saw from five yards away that my plants were not *C. montana* but *C. pilulifera*, and I had made an almighty boob.

The discovery raised doubts about the Hanbury and Marshall specimens. On re-examination, one of them seemed clearly to be *C. pilulifera*, but the other three still looked very like *C. montana*. I then remembered that Clive Jermy had told me that under the electron microscope the epidermis of another pair of sedges, *C. rostrata* and *C. vesicaria*, could be seen to be utterly different the one from the other, and I asked him to examine by this method the Hanbury and Marshall specimens, together with proven specimens of both *C. montana* and *C. pilulifera*. He did so, and reported that *C. montana* carried a few very fine hairs and *C. pilulifera* a wholly distinct array of overlapping scales; and that *all* the Hanbury and Marshall specimens accorded in this respect with *C. pilulifera*. It therefore seems clear that *C. montana* has never been in Kent at all.

There are several morals to this tale. Never wholly believe what you read in books, never make a pronouncement on incomplete or unseasonable material, never pronounce on a balance of probability, and (since specimens both provoked and settled this enquiry) always take a specimen of anything unusual and be prepared to show it to others. This final recommendation is the last of my heresies, and I can sense the conservationists shuddering. I would not apply it to *Cypripedium*—there are cameras for such as that. But there are times when knowledge is, in my view, more important than conservation, and may indeed be the key to it. And though one is repeatedly shocked by the sheet upon sheet of specimens of a rarity that were taken by Victorian botanists, I can think of no plant that has become noticeably scarcer as the result of botanists' depredations. The depredations of gardeners, and especially of fern-fanciers, are quite another matter.

I have talked mostly about the gentlemen, because it would be impertinent of me to preach to the players (except perhaps out of the corner of my mouth). Also, I have concentrated on recording, because it is a botanical activity particularly fitted to the amateur, because it is the one in which I have myself been most deeply involved, and because it is the one for which I see a new and expansive phase about to open. There are, of course, many other ways in which the amateur can make his special contribution to botany. There is, for example, the study of critical groups: our expert batologists and rosarians are today all amateurs. And I would like, in conclusion, just to touch on two others, because

in so doing I can pay tribute to two close friends and admirable botanists whose loss, the one recent, the other just over a year ago, the Society now mourns.

John Raven, who possessed, in perhaps the highest degree that I have ever known, that botanical eye for a plant or for a habitat that I described earlier, had turned his attention from the plants that were there to the plants that were not there. From a detailed examination of the *Atlas* he had compiled lists of plants which, from their distribution elsewhere, he might have expected to find in his part of the Scottish Highlands but had not seen there. From his detailed knowledge of the terrain he predicted where they might be, and proceeded to search for them. The first intriguing results, both positive and negative, of this investigation were published in the last issue of *Watsonia*, alas just too late for John to see them in print. Alan Ward, of Sheffield, suffered in later life a whole series of health disabilities, including heart trouble and tuberculosis, which somewhat restricted his activities; but for twelve years or more he continuously surveyed the 100 yards of lane behind his house at Baslow, noting the flowering times of each species of plant present, and other behavioural phenomena. Whether any use has been made of his notes I do not know. His most positive discovery was that the 30 or so taxa present at the beginning of his survey had dwindled by the end of it to 20, largely as a result of the disappearance from neighbouring cornfields of weeds that had originally seeped through the hedge into the lane—a local illustration of a national trend. What I am sure of is that this sort of apparently elementary observation is potentially as valuable a basis of discovery as Mendel's equally parochial experiments with peas. And this adds to my conviction that, even in this age of scientific sophistication, the amateur botanist, with sufficient standards, honesty, and perseverance, can not only enjoy himself as much as ever he did, but can also make a real, and quite distinctive, contribution to botanical knowledge. Not only are gentlemen and players still in the same game—they are on the same side.