

# MORE BOOKS ON SCIENCE

BY EDDIE PARK

"Praised be, my Lord, for our sister, Mother Earth, which doth sustain and keep us, and bringeth forth divers fruits, and flowers of many colours, and grass". So said St. Francis of Assisi. In the more recent times men seem to have forgotten this simple fact — that the chief figure in all this is still Mother Earth, admittedly with increasing help from the human race. Unhappily, we seem to have rushed up the blind alley of thinking that Man is now the Master and that he has the ability with all his discoveries to dictate what he wants.

So, in our attempts to maintain (and in many cases recover) our golf courses, now is the time to re-learn the laws that Nature imposes on US.

It is necessary with Soil Science to curb the very natural enthusiasm that is engendered by a fascinating subject. A useful start is to look in the Public Library for a copy of the "Soil Survey Bulletin" for your own particular area. The Soil Survey has, until recently, been financed by MAFF and has produced detailed surveys for most non-urban areas. A brief outline of local Geology, Relief, Climate and Soil Formation is followed by detailed descriptions of soil profiles which are linked with maps identifying specific areas. Even more useful is the section on the suitability of each parcel of land for different purposes (including golf).

In my last article on old books I mentioned the splendid 'New Naturalist' series which I said could now be found in bookshops at very reasonable prices. Imagine my horror when the following week I visited a bookshop in York and found plenty of choice but all at about £25! Dark thoughts came to me that the BIGGA meetings were being held in York and someone had ruined the market — probably that new chap at Wentworth (another book collecting nut!) Fortunately, the following week I was in Holyhead and found one at £1 which all goes to show you just have to go far enough. This one was "The World of the Soil" by Sir E. John Russell (1957) still one of the best introductions to the subject. Russell followed Sir Dan Hall as Director of Rothamsted Research Institute and also wrote the classic "Soil Conditions and Plant Growth" (1961) and, less useful, "Soils and Manures" (1945).

Hall originally produced "The Soil" as long ago as 1902.

It is a matter of golfing history that in 1926 the R & A set up an expert panel to consider the dire state of British golf courses; this eventually became the Scientific Advisory Committee for the Board of Greenkeeping Research. Both Sir Dan Hall and Sir John Russell were members of it. Perhaps the authorities took things more seriously in those days?

Another prolific writer in this field was G. W. Robinson of Bangor. He wrote "Soils their Origin, Constitution and Classification" (1932) and "Mother Earth" (1937), this latter being a series of letters on soil addressed to Sir George Stapledon (yet another member of the Scientific Advisory Panel). In the Teach Yourself series there was some useful information in "Good Soil" (1944) by S. G. Brade-Birks of Wye College in Kent. Coming up to date a word of warning would be in order. Some of these subjects in the hands of the academics have become very detailed and full of theories and counter-theories — confusing for the student who simply wants to learn the basic principals. Two books available in paperback form which are established favourites are "An Introduction to Soil Science" (1974 reprinted 1980) by E. A. Fitzpatrick and "An Introduction to the Scientific Study of the Soil" (1927 reprinted 1980). Both these books enable the everyday processes in the soil to be studied in as much detail as the individual wishes. A really simple book is to be found in the Science for Everyman series. "Your Guide to the Soil" (1965) is probably aimed at the gardener or student farmer, but it is easy to read and fairly instructive.

It may seem a bit superfluous to talk about books on the use of chemicals on golf courses. Everyone who goes to the I.O.G. Trade Show at Windsor staggers home with carrier-bags stuffed with enough reading matter for a year. Perhaps the main thing is to get chemicals into perspective. Modern research confirms that we cannot afford to disturb the balance in Nature with the unnecessary over-use of chemicals.

Equally we cannot afford to return to the state of affairs on golf courses prewar. I don't suggest you buy it, but an out-of-date book called "Suppression of Weeds by Fertilizers and Chemicals" (1946) by Long and Brenchley plus old Bingley Journals, bring home the great advantages today of a few, well chosen chemicals. Good handbooks are available and are frequently updated. S.T.R.I. and the B.A.A. produce a "Directory of Sports & Amenity Turf Chemicals" and H.M.S.O. give us "Approved Products for Farmers and Growers" (the latter is useful for those who realise that some of the chemicals we need for large areas can be bought much more cheaply from farm suppliers). Herbicides are especially necessary to the greenkeeper and it is important to use the right chemicals for the target. Sutton's "Turf Weeds", the Weed Research Organisation's "Garden Weeds" by R. J. Chancellor and "Chemical Weed Control in Your Garden" by J. E. Y. Hardcastle are all most useful.

Now for a bit more history. R. B. Dawson, the first Director of the Board of Greenkeeping Research, had been trained at Rothamsted under Hall and Russell and one of his earliest tasks at Bingley was to write the leading article in the new Journal. As his subject he choose Plant Ecology and he went on to write a simple outline of the principals of that subject which, in spite of all subsequent discoveries, still makes good reading today. A very close look at that subject is essential next time.