

books to read. They can be read pleasurably by the general reader.

JOHN CLEGG

The Peregrine Falcon, by Derek Ratcliffe. Poyser, £12.

Derek Ratcliffe, an undoubted and critical scientist, has been as enthusiastic as any amateur in his life-long and deep interest in the peregrine, and much of his work with the Nature Conservancy and related bodies has been researching environmental problems which either directly or indirectly affect the peregrine. All this has resulted in a 400-page readable volume.

After describing the peregrine's changing fortunes – protected, persecuted and poisoned – the author surveys its present habitat, distribution and numbers, concluding that there are few parts of Britain and Ireland in which it could not live, given the chance, for at least some part of the year. The chapter on food and feeding habits is fascinating, not only because of the description of food taken, hunting efficiency, food wastage and calculations of speed attained in a stoop, but because in Ratcliffe's writing you sense the thrill that comes from watching these aerial manoeuvres. In a chapter on population and dynamics he reviews the peregrine's past and present status which is, in part, linked to the pesticide story, of which he gives a full account. Here his own detective work on thinning egg shells resulted in important disclosures. Incidentally, he comments forcefully on the failure of the Pesticide Safety Precaution Scheme to publish any report in the last 12 years.

The peregrine is regarded as an ecological barometer, being the terminal focus of energy in a wildlife community, and in his final chapter Ratcliffe looks at its future as it runs the gauntlet of egg-thieves, pet-keepers and the threat of increased acres of Forestry Commission conifers. He concludes that pesticides are the bird's biggest problem, and, if that can be overcome, the peregrine, aided by a growing number of sympathisers, probably faces a brighter future than many birds and other animals.

The book is illustrated by four fine watercolours and a series of black and white pictures by Donald Watson, and more than 60 photographs. It is an example of what a good monograph should be: readable, well produced and good value.

PETER CONDER

Monarchs of the Glen, by Duff Hart-Davies. Cape, £1.95.

Highland Wildlife, by Richard Perry. Croom Helm, £6.95.

Monarchs of the Glen, written with love and knowledge, takes us back to the earliest days of the Caledonian Forest, liberally covered with ancient pines and harbouring bears, beaver and wolves as well as red deer, more akin in size to English park stags. But as the author points out, trees are not essential to a forest (derived from the Latin *foris*, or outside), which is uncultivated land set apart for sport, usually deer.

The monstrous evictions from 1780-1830 were caused by the introduction of sheep and the simultaneous collapse of the kelp industry. Their reign was short-lived, however, for by 1870 the economy of 3½ million acres of the Highlands was that of the deer forest. Probably not more than 1800 people gained their living thereby, but as early as 1850 the custom of letting stalking had arrived. Until fairly recently, most stalking was done by rich landowners; but nowadays more and more letting is by the stag rather than the season, allowing many more people to participate, including foreigners.

Most proprietors try to shoot selectively (though it's hard to deprive a foreigner of his one and only chance), thanks to the invaluable work done by the Nature Conservancy on Rhum; and there is unlimited demand for venison in Germany. This is as well since only deer have the stamina to produce protein out of marginal, albeit beautiful, land. Therefore the growth of deer farming is predictable. Yet, given good fencing, this need not affect stalking's future for, as the author points out: 'Once the stalker has set foot on the hill, he is just as dependent on his legs, his wind and his wits as were his Victorian predecessors. Like them, he is alone with the grouse, the eagles and the deer.'

Highland Wildlife, the revised and augmented edition of Richard Perry's *In The High Grampians*, long out of print, has new chapters on deer, dragonflies and dippers, so the net is spread wide. For seventeen years the author lived on upper Speyside in that fascinating area between the Cairngorms and Monadhliath, and his field work was both patient and thorough. In one 11-hour day he walked 30 miles (including 13 on the tops) with but two short halts only to encounter 13 pairs of ptarmigan and one of golden plover. For two years he traversed a mile-long control 'pitch' of the river west of Newtonmore to count the dippers occupying stations, noting variations both as to season and the height of water: on one occasion in early December there were no fewer than 21, and on a notable day a month later he watched one swim for 45 seconds under a shelf of ice. But by May 3, after breeding, the stations were empty and remained so until August 15. Deer demanded even greater patience, since by letting them feed in towards him, he was once in the midst of stags at less than five paces distance. I enjoyed the account of grouse following a herd of 60 stags to take advantage of where they had pawed the thick snow clear.

DAVID JAMES

The Natural History of Shetland, by R. J. Berry and J. L. Johnston. *New Naturalist* 64. Collins, £8.50.

In the modern world habitats and species tend to be ignored until they are about to be destroyed. Despite all the care that has been taken to protect the Shetland environment from the impact of North Sea oil, there is some reason to fear that all the intensive work on the wildlife of Shetland, of which this excellent book is an epitome, is merely a prelude to the massive pollution of at least the marine part of that environment. The record of the shipping companies involved does not encourage hope that the North Sea, alone of the world's oilfields, will not prove an environmental disaster.

However, if the disaster should occur, we have here an excellent account of what we shall have lost. Shetland is of especial importance for its marine life, particularly seabirds, so it is especially sad that it is the marine environment that is threatened rather than the terrestrial. Shetland's terrestrial wildlife is mainly notable as an example of how impoverished this can be in an archipelago on the fringe of a continental land-mass with a fairly bleak climate. The book would have been worth writing to document this alone, so we should be grateful to the Editors of the *New Naturalist* for perceiving that it would be worthwhile, and to the authors for doing their job so well. Perhaps inevitably only the main habitats and vegetation and the mammals and birds are comprehensively covered; invertebrates and lower plants always get relegated to appendices, so that it takes an effort of the imagination to realise that they are the base of the whole pyramid of life, without which the more eye-catching flowering plants, mammals and birds could not exist. One day conservationists will catch up with this fact.

RICHARD FITTER

Ecology of the English Chalk, by C. J. Smith. Academic Press, £23.80.

This book is a comprehensive review of the English chalk in all its ecological aspects, with occasional reference to its continuation across the Channel. In ten chapters, usefully summarised in the Contents, it moves from geology and the making of the chalk landscape through climate, soils, vegetation and the associated fauna to economic uses of the chalklands and finally conservation. In four chapters devoted to vegetation, with particular emphasis on the grasslands, Dr Smith considers the plants in detail and offers a tentative classification of chalk grasslands. He describes vividly the fauna and some of the fascinating inter-relationships of plants and animals, and summarises the history and role of the rabbit. He also gives an up-to-date list of the surviving 'natural' areas.

This is the first textbook to deal in such depth and in such a comprehensive manner with one particular geological formation. Enough is given from the important papers to