

The papers on oil pollution will be of much greater value to the non-specialist. They are no less technical than the oil industry papers but are neatly divided into the effects on Fisheries, Shore Life, Birds and Long Term Low Level Exposure in all areas.

The problems associated with analysing the effect of one pollutant, oil, in the marine environment are expressed in all papers, and admirably summarised in one, as follows: "Chronic pollution of marine waters by oil from numerous sources is widespread but hard to quantify. It is also difficult to specify its biological effects, since these can often be deduced only from laboratory experiments in conditions which are far from natural. In the field, it is rarely possible to exclude the effects of other pollutants or adverse natural conditions."

Two papers provide valuable data on the role of Government and the oil industry in oil spill clean up.

This volume will be a valuable reference to those interested in the problem of oil and its effects on the marine environment. **P. Selwood**

*Geology of the North-West European Continental Shelf.* Volume 1. By D. Naylor and S. N. Mounteney. Pp. 162. (Graham Trotman Dudley; London, 1975.) £6.50. Volume 2. By R. M. Pegrum, G. Rees and D. Naylor. Pp. 225. (Graham Trotman Dudley; London, 1975.) £8.50.

With the increasing level of effort now being put into the exploration and exploitation of the Continental Shelf surrounding the British Isles, a large number of non-petroleum specialists have become involved in the work. Bankers, lawyers, accountants, economists, and professionals in many disciplines are finding that an elementary understanding of the geology of the various areas in which their companies are working is a distinct advantage. And it is for such professionals that these books were essentially compiled.

It is not quite clear why the book is in two volumes particularly as both contain together only 380 pages. Nevertheless the division between the books is clear enough—the first dealing with relatively unexplored western basins of the Shelf, the second being confined to the North Sea area. If a division has to be made then this at least is a logical approach.

Assuming their intended market, both volumes tend to assume very little geological knowledge, but there are times when without it the layman will be stretching a little. Volume 1 begins by introducing the concept of plate tectonics in an attempt to place the

## Biochemistry of hormone action

*Biochemical Actions of Hormones.* Volume 3. Edited by Gerald Litwak. Pp. xvi+415. (Academic: New York and London, August 1975.) \$36; £18.

READING this book straight through it becomes increasingly obvious that the real breakthroughs in the understanding of hormone action will only come when the tools provided by molecular biology and genetics are brought to bear on the problems. Unfortunately, not all the hormone-responsive systems currently under study are amenable to

British Isles in a regional framework. To a geologist the way in which this is done may seem a little glib but the message may get across nonetheless. By reference to geophysical and bottom sampling data acquired in each of the western basins together with a resumé of the inferred stratigraphy, a generalised picture is built up of the basins stretching from the Channel to the west of Shetland. The amount of information in each chapter varies with the amount of information published, but nevertheless for the audience intended there is sufficient data to give a reasonable idea of the variations in structure and rock type between each of the basins considered.

A more systematic treatment, however, with maps, cross sections and stratigraphic tables, would have enabled comparisons to be made rapidly, as would mention of the relationships between onshore and offshore geology, even in diagrammatic form. The account of the palaeogeography and the evolution of western Britain, brief though it is, seems somewhat misplaced. Indeed it might be said that the book tends on occasion to forget its audience. What will be useful to the layman, however, are the brief notes on how oil is trapped, and explanation of how a seismic survey is conducted and how a well is drilled. These are partially repeated in the second volume together with a glossary, but they perhaps bear re-inforcement.

The second volume is concerned mainly with the North Sea and the information it contains is based on factual material, much of it released for the first time at the Conference in London last November, and which is drawn on freely. The stratigraphy is described systematically from the basement to the Tertiary system, and sadly the procedure of describing Basins is not adopted in this volume as it was in

these approaches and very often when these tools would prove useful they are not applied. The articles in this book serve to illustrate this point.

Molecular and genetic studies are obviously much easier where the gene product affected by the hormone can be identified; the chapter by Schimke *et al.* provides an elegant example of molecular biology being used to study ovalbumin induction in the chick oviduct. This chapter appears next to another (on the same topic) by Rosen and O'Malley which has an annoying amount of overlap. Indeed this is a general fault with the book: half of it is concerned with steroid hormones, and the central dogma of steroid action is repeated several times. But some of

the first. In many ways this method is a much more convenient one of describing an area which geologically has a very complex history.

The "field data sheets", which is effectively what they are, will be appreciated, however, by the layman as they condense a considerable amount of information very concisely. Each field is presented in a similar manner each having a map and cross section together with pertinent information on the field. The stratigraphic information which has been derived from studies of the fields is incorporated into the accounts of various geological systems and thus the fields are placed in their geological perspective. Because the book does not use the Basin approach of the first volume, however, the significance of the various discoveries (for example, the predominance of gas fields in the southern North Sea Basin) might go unnoticed.

It may be that it is too early in the history of the exploration of the Continental Shelf to attempt the synthesis which is presented in the second volume. There is still a great deal of information that remains confidential, and authors are unable to construct the geological cross sections and maps which would make all the difference to unravelling the history of these areas and which are so essential to an elementary understanding of the geology.

In many respects the two volumes are complementary, one deals with essentially untried areas the other with proven and established Basins. They both contain a considerable amount of compiled information—albeit very generalised. It is a matter of choice and of the reader's expertise as to whether one goes to the original text (the proceedings) or to this concordance. **J. R. V. Brooks**