

ensuring that the results of this work reached a wider audience. Another desirable development would be the publication of short notes. Many fishery workers have information which should be placed on record and which is unlikely to be included in a fuller paper. The *Journal of Fish Biology* would be a very appropriate place for the publication of such records.

K. A. PYEFINCH

GUIDE TO THE DEEP

The Fishes of the British Isles and North West Europe
By Alwyne Wheeler. Pp. xv+613+16 plates. (Macmillan: London, May 1969.) 170s.

"THERE is no modern book which deals with British Fish as a whole." So begins the preface to the first edition of Travis Jenkins's *The Fishes of the British Isles*, and this compact and handy volume has run to two editions, several reprintings, and is now being revised. Wheeler's *The Fishes of the British Isles and North West Europe* covers more ground (396 species compared with 372) in greater detail. It is a big book and provides keys and figures for the identification of all the species likely to be encountered in north-west European waters. There is a real need for such a work and the requirement is met neither by Travis Jenkins nor by the Identification Charts (Faune Ichthyologique de l'Atlantique Nord) of the International Council for the Exploration of the Sea.

A picture key is provided to assign a fish of unknown affinities to a particular order or family. The key is a series of silhouettes typical of the members of each group, accompanied by a summary of the critical features. Silhouette picture keys are better known to ornithologists than ichthyologists, but Wheeler's key works well and there should be little difficulty in placing a fish in the correct order or family within the main body of the book, where the arrangement is based on the classification proposed by Tate Regan. Descriptive and general biological information is included at this level which is followed by dichotomous keys to identify the species. These are illustrated by good line drawings, each accompanied by a 400-500 word description with the subheadings identification, biology, and distribution. The latter is generally illustrated by a map. The prefatory section includes a species list, and the arrangement and layout of the book are clearly explained in the introduction. The bibliography includes a number of general works and refers to over 300 original papers grouped at the order or family level within which they are arranged alphabetically. The index uses both Latin and common names and there are sixteen plates, in which forty-eight species are shown in colour and twenty-nine in line and wash.

My colleagues at the Fisheries Laboratory, Lowestoft, have tried a number of the keys and found them clear and simple. The line drawings are excellent and a lot of information is summarized in the text and figures: the drawings of the pharyngeal teeth in the Cyprinidae (Figure 69) and the outlines of common gadoids (Figure 94) are particularly useful.

This is a book for any research establishment which has to deal with fish, university departmental libraries, the reference section of public libraries and those angling associations that have a club room and buy books. I hope to see a copy on all British research ships. But the price may deter the private buyer. Books, like petrol, are becoming very expensive and the purchaser has a right to expect the best value for his money: this book is good value, but not perhaps the best. Such a volume belongs on the desk and not on the wet bench, and fish are almost inseparable from slime and water. My opinion, which is shared by several of my colleagues,

is that the plates add nothing to the practical value of the book. These could have been omitted with a reduction in price or, alternatively, with the substitution of a separate field or wet bench key, such as is provided in Vernon Watson's *British Mosses and Liverworts*.

Wheeler has written a first-class reference book and I shall profit from the use of our library copy. I look forward, however, to having a personal copy of the revised edition of Travis Jenkins, which should please my pocket in more ways than one. It comes as no surprise to learn that the reviser is none other than Alwyne Wheeler.

F. R. HARDEN JONES

TAME EXPERIMENTS

A Laboratory Introduction to Psychology
By John W. P. Ost, James Allison, William Vance and Frank Restle. Pp. x+214. (Academic Press: New York and London, January 1969.) 39s 8d.

THIS book contains accounts of nineteen elementary practicals in experimental psychology. It does a very workmanlike job and is more useful than any of its rivals. The practicals are described with great lucidity and with no wastage of words. The amount of background information given is sufficient for the student to grasp the rationale behind each experiment but not so much that he cannot readily take it all in within a few minutes. The experiments are intended to form part of an introductory course so that they are not particularly novel. They are, however, well chosen and require a minimal amount of apparatus. They include experiments on operant conditioning of rats, on sensory processes in man and on human learning and performance. An appendix contains a very useful account of elementary methods of data analysis including a lucid introduction to non-parametric statistics. The book is completely self contained and includes data sheets and usable reproductions of some of the visual stimuli involved in the experiments.

Most experimental psychologists running practical classes know what to aim at, but most of them are too lazy or too busy to prepare their classes and the accompanying notes as carefully as they are prepared in this book. It could prove a godsend to the lazy lecturer faced with the problem of running an introductory practical class, and the price is modest.

N. S. SUTHERLAND

DIGGING UP BONES

Animal Bones in Archaeology
Book of Notes and Drawings for Beginners. By Michael L. Ryder. (Mammal Society Handbooks.) Pp. xxiv+65. (Blackwell (Scientific): Oxford and Edinburgh. Published for the Mammal Society, 1969.) 17s.

THIS small volume is intended as a "field guide", with the purpose of aiding and encouraging aspects of mammalogy. It is, of course, a fact that archaeological sites, as a prolific source of data relating to animals and man/animal relationships have in the past been neglected by both zoologists and archaeologists. Bone assemblages from this source fall between two disciplines which are far apart in their interests and in their concepts and few people have so far broadened their interests sufficiently to encompass both. This is in part due to a narrow professional unionism which encourages the strict separation of disciplines, and it may be that a change in this situation is now more likely to come by demand from the bottom up, rather than by direction from the top down. There is therefore a need for such books as these and their influence in the long run may be greater than that which might be expected.

The book is elementary and may be regarded as a first introduction to the subject. It is simply written and easily understood. For this reason it may be underestimated, for much good sense and experience are evident in its pages and even an advanced student may on occasion find good reason for further thought. The drawings are simple and concentrate on conveying information rather than elegance. For a field guide, there could have been more of them.

There is a section on some methods of collecting data from the specimens. Here a more coherent explanation of the objectives in mind, and how bone samples may be biased and subsequently weighted to correct the bias, might have been helpful.

There is also a section on writing the report and interpreting the finds. Both are formal in their approach and it might have been hoped that Michael Ryder with his experience would have given a lead in this direction, for wisely he has not hesitated to do so elsewhere. On the whole, however, the author is to be congratulated on producing a book which is admirably suited to its purpose. At least there can now be no excuse for an archaeologist to know nothing at all about many of the objects he is digging up, or for the student of animal bones to produce the kind of perfunctory report which does no more than clutter the pages of so many publications.

E. S. HIGGS

Obituaries

Dr H. H. Storey

WITH the death at the age of 74 in Nairobi on April 5, 1969, of Harold Haydon Storey, East Africa has lost one of its most eminent and senior scientists. After serving as a mycologist in South Africa, where he did classical work on groundnut rosette disease, Dr Storey came to East Africa in 1928 to work at the East African Agricultural Research Station, Amani. During the next forty years he published more than forty papers, mostly on virus diseases of plants in East Africa, but also on other disorders and on the genetics of disease. Although primarily a research worker, he did his share of administrative work, during the Second World War and, notably, just afterwards as research secretary in the agricultural section of the Colonial Office; in this capacity he played a prominent part in the organization of colonial agricultural research. Most of his scientific work was done at Amani and, subsequently, on the formation of the East African Agriculture and Forestry Research Organization, at Muguga. He was the first deputy director of EAAFRO and later acted as director; finally, having retired from administrative responsibilities, he continued his research work until his final retirement at the end of 1966.

Storey's work in the 1930s on virus diseases of tobacco, groundnuts, maize and casava provides the background to our present knowledge of these subjects. This was recognized in his election as a fellow of the Royal Society in 1946, when he was described as "one of the foremost workers on virus diseases of plants, who has made noteworthy investigations on the role of insect-vectors in the transmission of such diseases". Later he turned his attention more to breeding for resistance to virus and fungus diseases. In this connexion it is interesting to note that as far back as 1931 he recommended that the only sound way to combat coffee berry disease was to breed for resistance; if this advice had been followed it is probable that the disease would never have reached the epidemic level now found. But as far as Storey was concerned this work was merely a sideline. It is for his work on plant viruses, especially with regard to the original techniques he developed, that he will be remembered.

Correspondence

Who is the Piper ?

SIR,—May I add two important points to your admirable summary of the financial support of BIBRA (*Nature*, 222, 401; 1969). First, there are some industrial organizations which do support BIBRA generously, and which thereby subsidize others to whom food safety seems of little concern. Second, BIBRA has received much encouragement and financial assistance from the Nuffield Foundation over the past five years. This has resulted in a great deal of basic research in molecular biology, histochemistry and electron microscopy, the results of which are already facilitating the interpretation of toxicological studies, and indicating more rational experimentation for the future. Other support for this type of work has come from the Wellcome Trust and from the Ministry of Technology (in addition to the 150 per cent matching of industrial contributions).

Our present lack of total dependency on either government or industry has great advantages to both, but it seems that in this day and age one must be committed in order to succeed—at least financially.

Yours faithfully,

R. F. CRAMPTON

The British Industrial Biological
Research Association,
Carshalton,
Surrey.

Whales and Whaling

SIR,—For those engaged in the industry, whaling has never been a "quaint" business. This does not gainsay that in years past a strange romance has enshrouded man's pursuit of the behemoth of the deep: "His chimney's afire!" chuckled the heartless mate, when the spout, which had formerly been thin and white, reflecting rainbows in the late sunshine, became first pink and then thick with gouts of blood."

At a time when survival of the major whale species—save for the Sperm Whale—is severely endangered, however, it is grimly incongruous that L. H. Matthews and R. J. Harrison still celebrate whaling as a pleasant pursuit. In his review (*Nature*, 222, 44; 1969) Harrison writes of Matthews's new book, *The Whale*, "There is something for everyone, and the excitement, adventure and romance of whaling are conjured up on every page". The rest of the review seems as blissfully unaware of the perilous state of the whales today: "The history of the technology of whaling provides an opportunity to study a closely knit, international fraternity of brave, adventurous men who were out on the high seas for great rewards," or "Modern whaling is indeed free from personal danger, but it is still no joyride and still no 'cold-blooded assassination'."

No! Modern whaling is "cold-blooded assassination", for the whale has no more chance than a bull in the ring as he is scouted by helicopter, scanned by sonar, and run down by mechanized ships.

The decimation of whales is closely linked with man's own basic problem of survival. For reasons not yet clear we seem to possess deep within a fascination "with gouts of blood" that won't let go. This fascination is wedded—in this instance—to whaling which persists as a romantic notion as bloody artefacts from the age of sail continue to be snapped up at auction, and attention is only slowly and belatedly being directed to the intriguing behaviour of the whale himself. If the International Whaling Commission had been named the International Whale