BIOLOGY

Textbook of Biology

By Dr. E. R. Spratt and A. V. Spratt. Second edition. Pp. viii+692. (London: University Tutorial Press, Ltd., 1939.) 11s. 6d.

IN preparing the second edition of this work, the authors have completely revised the original text and figures and have added two new chapters dealing with Pinus and Angiosperms to meet the requirements of the Pharmaceutical Society's examinations. The material presented is intended to cater for students pursuing courses in biology for the intermediate science, pharmacy, and medical examinations of Great Britain, the higher school certificate, the preliminary medical, and other examinations of a similar standard. The greater part of the book is concerned with minute descriptions of the anatomical mechanisms of the plant and animal types met with in these various examination syllabuses. This is followed by a smaller physiological section, which is chiefly concerned with plants, and a chapter on ecology. The laws of heredity and evolution are summarily treated, while the appendix contains useful practical hints. The book is admirably illustrated with a considerable number of clear diagrams. Inaccuracies of the previous edition have been largely eliminated, although it is a little disconcerting still to read that Pellia "is branched to form many lobes, thus reminding us somewhat of the liver of an animal and giving the plant the name liverwort".

This is indeed a text-book and would only be of use as a source, and perhaps better, revision book for the examinations mentioned above. T. H. H.

A Naturalist on Rona

Essays of a Biologist in Isolation. By Dr. F. Fraser Darling. Pp. x+138+28 plates. (Oxford: Clarendon Press; London: Oxford University Press, 1939.) 7s. 6d. net.

R. FRASER DARLING'S sojourn on the isolated island of Rona has repaid its hazards, since it gave him the opportunity of writing these essays as well as of observing that unique seal rookery during the breeding season. Many subjects are touched upon in the eight essays, ranging from the archæology of the primitive chapel and cell of St. Ronan, which the author partially restored, to display of birds, social life of animals, animal sanctuaries, and an excellent account of the habits of the grey seal. The essays are vivid in their description, are attractively written and are illustrated by some beautiful photographs. If occasional inaccuracies creep in they are not serious. For example, in his strong plea for the creation of sanctuaries in Great Britain, the statement that "before Theodore Roosevelt's time a few people had thought, rather ineffectually, about the protection of wild life", takes little account of the facts that Congress had set aside the Hot Springs Reservation in 1832, that the Yellowstone National Park was established in 1872, and that the American Ornithologist's Union had its law for the protection of wild birds in 1886, quite apart from much effective legislation in other countries.

A Catalogue of Yorkshire Fungi

By the late F. A. Mason. Completed from the Records of the late Alfred Clarke by Dr. John Grainger. Pp. xii+110. (London and Hull: A. Brown and Sons, Ltd., 1937.) 7s. 6d. net.

THIS Catalogue of Yorkshire Fungi (Limited Edition) is essentially an extension of Messrs. Massee and Crossland's "Mycological Flora" (1905), which attempts to bring up to date those records, supplemented from forays and individual efforts.

The new volume adds about 835 species and varieties, chiefly in the Basidiomycetes (660) and the Ascomycetes (110) sections. The × and — method of recording is unsatisfactory as it signifies the mere presence or absence of the species in an area of usually more than 1,000 square miles with no indication of frequency or otherwise, so that the old Flora will still be the only reference book giving both species and localities.

Apart from the above and a dateless title-page, the chief fault of the work is its omissions, primarily of sources: thus many species and V.C. records are absent, for example, August 1934 Goole district records have been placed in the East and not West Riding, no mention of Entomophthoraceæ for the East Riding, although seven of these species were listed in the B.M.S. Transactions 1932; while Cordyceps entomorrhiza is a misnomer for Cordyceps gracilis.

The Mycological Committee has reviewed the work and decided to publish amendments in the *Yorkshire Naturalist* that will greatly add to its utility.

J. W. HAIGH JOHNSON.

Tertiary Siphoneous Algæ in the W. K. Parker Collection, with Descriptions of some Eocene Siphoneæ from England

By Lucien and Jean Morellet. Pp. ix +55+6 plates. (London: British Museum (Natural History), 1939.) 5s.

ALCAREOUS green algæ (of the Siphonales) are now almost confined to warm seas, but fossil representatives are being discovered widely. catalogue describes an important series of specimens from a well-known Eccene locality in France, and for the first time some similar ones from England. The study of these fossils has required very close observation of minute specimens (the present collection had been classed as Foraminifera), bold hypothesis and good luck; this last is seen here for Ovulites. This common fossil was known as little shells shaped like a blown bird's egg. Specimens have now been described in which a chain of these are still held in position by the continuous skeleton of an encrusting Bryozoan; the new specimens show that Ovulites is very like the existing alga Penicillus.

The large number of specimens mentioned as Incertæ sedis indicate room for further study and further good luck.

Tom M. Harris.