

otherwise, there would surely be some mention of this proclivity among the 28 species of *Salix*. 1,417 species of vascular plants, including 193 introductions, are found in Manitoba, the largest families being the Cyperaceae (159 native species), Compositae (144) and Gramineae (114). No less than 118 species of *Carex* are listed, but there is no genus comparable, at any rate in treatment, to the British *Rubus* and *Hieracium*. The author is to be congratulated on a valuable piece of work which will reward the close scrutiny of British and European botanists concerned with the preparation of Floras.

N. Y. SANDWICH

Diseases of Domestic Animals in New Zealand

Prepared by the Technical Committee, N.Z. Veterinary Association, Inc. Pp. x+240. (Wellington: Editorial Services, Ltd., 1958.) 35s.

THIS book is not for the arm-chair reader but for the busy veterinary surgeon needing some form of reference to which he can turn for essential and up-to-date factual information. It deals with the significant diseases of domesticated animals and poultry, only as they occur in New Zealand, grouped under the headings, bacterial, viral, protozoal, fungal, parasitic, nutritional and metabolic, those caused by poisons, and miscellaneous. Under each heading, the diseases are listed alphabetically, and each disease is covered in one or, at most, two pages in précis form through the use of subheadings, for example, species affected, notifiable, distribution, occurrence, herd incidence, etiology, mode of infection, signs, pathology, diagnostic aid, prognosis, treatment, etc. The brevity of style and standard form of presentation have been used deliberately for ease of reference, so that one is presented with an accurate and authoritative summary of the disease position in New Zealand. Some minor criticisms could be made. As one example, it is a little distracting to find that all the intestinal nematodes of a particular host animal are treated as causing one disease. Such criticism, however, is trifling and amply compensated by the wealth of information presented so simply and concisely and with so few errors. There is an index of eight pages which could, with advantage, have contained more entries such as helminths, cestodes, trichostrongyles or even worms, to mention a few. The eight appendixes listed in the contents table were not included in the reviewer's copy. J. N. OLDHAM

Birds of Cyprus

By Dr. David A. Bannerman and W. Mary Bannerman. Pp. lxxix+384+31 plates. (Edinburgh and London: Oliver and Boyd, Ltd., 1958.) 63s. net.

ONE has come to expect volumes from Dr. Bannerman that are sumptuous as well as scholarly, and here he and his wife present another. The scale may even seem luxurious for the avifauna of so small a territory, but Cyprus has a considerable ornithological literature and its bird-life shows interesting features. The island lies on the fringe of the tremendous migrations of the Levant, and more than half its 333 recorded species are purely birds of passage; others are winter visitors. Some 70 species breed, a third of them as summer visitors: among the residents, 14 belong to races peculiar to the island. It is remarkable that, in spite of extensive forests, there are no woodpeckers and no nuthatch.

There are references to birds going back to the fourteenth (falconry only) and sixteenth centuries; serious ornithological publications date from 1787

onwards; in the past few years ornithologists in the Armed Forces have added numerous records; the Bannermans themselves spent some months on the island in 1954 and in 1957-58 for the purposes of the book, and they have drawn both on the other sources and on their own observations. For the benefit of the student in Cyprus, there are notes on identification (with numerous figures) and on extra-limital distribution: Greek and Turkish names of species are given. For ornithologists elsewhere, the information about local status is of importance as a contribution to a wider pattern. The illustrations include some fine colour plates by D. M. Reid-Henry and Roland Green.

LANDSBOROUGH THOMSON

British Fermentation Industries

By J. M. Whitmarsh. Pp. xiv+133. (London: Sir Isaac Pitman and Sons, Ltd., 1958.) 25s. net.

THIS condensed account of industrial fermentations, which is restricted to British practice, embraces both old and new processes, but deliberately excludes consideration of the potable and antibiotic industries. The manufacture of industrial alcohol, acetone and butanol, lactic acid, vinegar, baker's yeast, citric acid and of sorbose is described as illustrative of the older processes. The inclusion of the obsolescent industrial alcohol and acetone-butanol processes, both of which have been superseded by synthetic chemical processes, is justifiable in that they have provided, over a number of years, fundamental knowledge and technological experience which has facilitated the rapid large-scale development of newer processes. It is especially valuable to have good condensed accounts of these new, less-familiar, processes as exemplified by those by which vitamin B₁₂, riboflavin and dextran are manufactured and by which difficult steroid transformations may be effected; for it is in these fields, as well as in that of antibiotic production, that the fermentation industries may be expected to continue to develop and prosper. In all, Dr. Whitmarsh has written a very useful account of the subject within his self-imposed restrictions. Despite compression, there is adequate technical detail to provide a good introduction to the fermentation industries for new entrants, of whom the biochemical engineer should be particularly mentioned. There are few errors of fact or of typography, but the taxonomically minded will boggle at reading that *Euglena* is a mould (p. 82) and that *Rhizopus nigricans* is a *Mucor* species (p. 115).

Textbook of Biochemistry

By Prof. Benjamin Harrow and Prof. Abraham Mazur. Seventh edition. Pp. ix+557. (Philadelphia and London: W. B. Saunders Company, 1958.) 52s. 6d.

PROF. Benjamin Harrow has a long and honourable career as a writer of text-books of biochemistry. In 1935 he and Carl P. Sherwin collaborated as joint editors of a "Text-book of Biochemistry" to which chapters were contributed by a number of authorities. This book set a standard of clarity and breadth of information which was upheld later by a text-book with Prof. Harrow as the sole author, of which editions have already appeared ranging from the first in 1938 to the sixth in 1954. For the sixth edition Prof. Harrow was joined by Prof. Abraham Mazur as joint author, and now a seventh edition is called for, as might be expected, four years after the sixth.