

The taxonomic section is devoted entirely to the North American flora and fauna and thus should be used with caution by the Australian student. However, as many families and genera are cosmopolitan this manual should provide a good starting point for the identification of certain Australian aquatic groups. These include the desmids, diatoms, protozoa, rotifers, the crustacean sub-class copepoda and the crustacean order cladocera. In Australia, the keys for identification of aquatic insect larvae and adults should be used with particular caution and the fish keys are entirely inapplicable.

Diagrams and keys throughout this section are clear and concise - the author making liberal use of the best modern marks available in each group. Of particular interest to the student, amateur naturalist and other persons concerned with the identification of fishes is the author's section, "Definitions and counts of fish structures". Here all counts and measurements necessary for fish identification are described concisely and fully - in fact, we know of no single publication where these are described with such clarity.

The second main section contributes little new information, but has brought together, in a concise form, the basic requirements for a study of the aquatic environment. The section on "Distribution and abundance of stream-dwelling organisms", although not comprehensive, provides the student and fisheries worker with a useful statement of the problems of stream productivity. It gives an insight into the quantity and quality of research necessary for good stream management.

The revision of this manual, originally produced by two of America's top fresh-water biologists, should fill a definite niche in aquatic studies in North America. We can only hope that Australian authors will provide us with a similar manual in the near future.

(R.J. Slack-Smith)

SWANS AT AIRPORT

The black swans domiciled on specially-prepared pools have been one of the many attractive features of the new Perth airport which have excited attention and comment. As some concern, however, was expressed for the welfare of the birds, particularly in the small pool in the main quadrangle, an official

inspection of the pools was made on February 4. Those taking part were Dr D.L. Serventy, representing the Fauna Protection Advisory Committee, Mr C.F.H. Jenkins, representing the Zoological Gardens Board, who donated the swans to the airport, and this Department's Fauna Protection Officer, Mr H.B. Shugg. They were met by the Airport Manager, Mr H.A. Lee, whose staff supplied details of the diet and handling of the birds and maintenance of the pools.

The swans were found to be in good condition; their waterproofing and plumage being excellent. Their diet, which was said to consist of bran, pollard, wheat, considerable quantities of watercress with some lettuce and silverbeet, was considered to be most adequate. The temperature of the water in the pools was taken and found to be up to 80° in the quadrangle pool and up to 84° in the large outside pool. The temperature was lower in the smaller pool as the water in it was changed more frequently. These temperatures were thought to compare favourably with natural waters. They were about the same as those found in farm dams by the Senior Research Officer during the trout research programme. The only recommendations made by the party was that the water in the small pool be changed twice a week during the height of summer and that cast feathers be removed during moulting periods. The airport manager agreed that this work would be carried out.