DUVAL, C. T. (Series Editor). Fauna of New Zealand. Science and Industrial Research, Wellington, New Zealand. MOUND, L. A. and A. K. Walker. 1982. Number 1, Terebrantia (Insecta: Thysanoptera). 113 pp. ($6.80 U.S.). MC COLL, H. P. 1982. Number 2, Osoriinae (Insecta: Coleoptera: Staphylinidae). 89 pp. ($6.80 U.S.). HOLLOWAY, B. A. 1982. Number 3, Anthribidae (Insecta: Coleoptera). 264 pp. ($8.00 U.S.).

Copies are available from: The Publications Office, Science Information Division, DSIR, P. O. Box 9741, Wellington, New Zealand. Cost of overseas mailing is $1.20 U.S. Standing orders are accepted.

This series about the non-marine invertebrates of New Zealand was inaugurated with appearance of the first three numbers, each of which treats a different group of insects. J. F. Longworth, Director, Entomology Division, DSIR, states in the Preface to the Series (Number 1, pp. 3-4) that the objective is "to provide authoritative and comprehensive guides to identification, in a medium accessible to all would-be users and that will evolve as an accumulating descriptive index of our insects, spiders, mites, and other terrestrial invertebrates". The publisher intends to produce annually about 600 pages in six average-sized contributions.

Because these numbers at hand are the first of what is likely to be a long and important series, it seems appropriate to describe their common properties, for such serve to characterize the series as a whole. Much useful information is found on the attractive tri-colored covers of stiff paper. The front cover has a drawing of a typical adult of one of the included taxa toward the lower left, and a generalized figure representing the form of the main islands of New Zealand toward the upper right. The title of the series is in the upper left, and Number of the particular issue, its title, and names of authors are toward the lower right. On the inside of the front cover, printed in brown, is a generalized map of the "New Zealand Subregion". The outside of the back cover provides general information about the faunal series, including a list of numbers in print, those in press, and those in preparation. Also provided in a single column on the left side are five headings, from top to bottom as follows: "Checklist of Taxa": "Introduction"; "Key to Taxa"; "Descriptions"; and "Illustrations". On the first page of each of these sections in the text is a broad black line that extends the length of the left margin except for one break in white, which is opposite the appropriate heading on the back cover. Thus, with a quick glance at these easily located pages, one can readily locate the desired section of the volume without having to thumb through the text.

On the inside of the back cover is an outline map illustrating the North and South Island, and Stewart Island. Indicated on each island are area codes and boundaries of an arbitrary system that was developed for recording locality data. Additionally, latitude and longitude are indicated in intervals of 10 minutes by lines which extend to but not across the land areas. The facing page has the same map but without the geographic areas indicated, and with the degree intervals of longitude and latitude extended across the land areas. This is the base map, portions of which are reproduced in the text, in association with information about geographical distribution of each of the species.

Printing is by offset lithography of camera ready copy on high grade glossy paper. The type style is easily read, with headings and captions in easily identified bold-face.

The title pages contain standard information about bibliography and printing, and the name of the insect taxon represented by an illustration on the front cover. Among the names of persons listed are those of the Editorial Advisory Group, and I noted with interest that this committee includes representatives from a university and from the National Museum of New

Zealand, as well as from DSIR. This seems to illustrate the broad level of institutional support accorded to this series.

The text begins with an abstract, followed by a checklist of names of the included taxa. This checklist serves as a detailed table of contents, for the appropriate page number is associated with the name of each taxon. Next is a table of contents followed by acknowledgements. The introductory material preceding keys and descriptions includes information of interest to naturalists generally (notes about phylogeny, ecological generalities about the taxon including host-plant relationships, biogeographic relationships of the New Zealand elements, number of species, *et cetera*), as well as notes about structures that are particularly important in identification of the included taxa. Careful study of this portion of the volume provides a reader with a variety of valuable insights and the information required to use the book for making identifications.

Keys and illustrations are important aids in making identifications, and they are feature components of this series. Illustrations, plentiful and excellent, appear in the form of line drawings emphasizing outlines, as detailed habitus drawings, and as photographs taken with the stereo-electron microscope. Beneath each figure is its number and name (or specific epithet) of the taxon of which it is characteristic. Each issue contains one or more illustrations with structures labelled for ease of recognition, thus facilitating learning those details required to use keys and descriptions.

With the featuring of maps on the covers, one might anticipate that geographical distribution of taxa would be an important component of the species treatments. Indeed it is, for each species of osoriine staphylinid and anthribid of New Zealand (Numbers 2 and 3) an appropriate portion of the standard range map is provided, with positions of localities of collections indicated by dots. Since similar maps are not provided for the terebrant thrips (Number 1) one can infer that the excellent idea to include such diagrams developed after the first part had been completed.

The descriptive section of each number contains the treatments of taxa. These are standard descriptions, with less information provided about structural details for previously described species than for those first described in these volumes. Descriptions of each genus and species in Numbers 2 and 3 include a statement about derivation of the generic name and specific epithet. Number 1 does not include such statements, and I infer that the decision to have such information was made after the terebrant volume was complete. This change and the one involving inclusion of maps for each species illustrate the flexibility of the Editorial Advisory Group and the Series Editor in their attempt to publish a series of the highest quality and of maximum value to naturalists.

Following the descriptive section is the reference section that contains complete citations (with names of serials spelled out) for the abbreviated citations presented in the text.

I have one objection about content, and that concerns the brevity of treatment of evolutionary aspects of the taxa. Inclusion of descriptions of new taxa means that these numbers are not simply handbooks for identification. Rather, they are taxonomic revisions. As such, one might have expected more comprehensive statements than were provided about phylogeny of species and genera, and about origin and development of their distribution patterns in the New Zealand Subregion. Dr. Holloway illustrated the wonderfully evocative transformation series seen in the female genitalia of New Zealand anthribids, and used this as the basis for a linear arrangement of genera in checklist and text. However, she did not extend her notions about evolution of anthribids to the species level. Dr. McColl illustrated the

taxonomic value of the copulatory piece of the genitalia of male osoriines, but then used this complex organ for nothing other than species diagnoses. At least the distribution patterns of the brachypterous species of *Paratrochus* McColl should have been interpreted in terms of vicariance theory as related to Pleistocene refugia of the North and South Islands.

Each number has certain unique features worth noting. Drs. Mound and Walker included brief sections about pest species and natural enemies of terebrant thysanopterans. The volume on osoriines includes a key to the subfamilies of Staphylinidae occurring in the New Zealand Subregion and notes on their status, prepared jointly by Drs. McColl and J. C. Watt. This volume also has SEM photographs illustrating the copulatory pieces of males of all New Zealand osoriine species. Dr. Holloway's volume has habitus drawings of 28 representative anthribids. These illustrations were exquisitely executed by D. W. Helmore, and are worth more than the price of the volume that contains them. Helmore also prepared the habitus illustrations that grace the covers of each of the first three numbers.

A nice touch in Dr. Holloway's volume is a dedication of this number to her former mentor, the distinguished palaeoentomologist Dr. F. M. Carpenter, Museum of Comparative Zoology, Harvard University, on the occasion of his 80th birthday. Inclusion of such a statement, unusual for a series such as this, shows a commendably flexible attitude on the part of the Editor. Most editors of serial publications prefer to live by virtually iron-clad rules of consistency that have a marked potential for generating stereotyped, dull presentation because they prohibit any sparks of expression or imagination that may illuminate a particular issue but that thereby depart from the standard format.

At the asking price, these volumes are virtually a gift to the entomological community. Even non-bibliophiles will be tempted to acquire the entire series. Entomological bibliophiles will be proud to have these volumes on their shelves, for each is truly a showpiece. Specialists in particular taxa will want to have the volumes that concern their special interests, for they will find therein a wealth of valuable information, whether or not they are specifically interested in the fauna of New Zealand. New Zealand invertebrate zoology and invertebrate zoologists will be very well served by this series. Indeed, New Zealand as a nation has been well served by those who conceived and established this series. I look forward with anticipation to its continued development.

G. E. Ball
Department of Entomology
University of Alberta
Edmonton, Alberta, Canada
T6G 2E3