

BOOK REVIEWS

Polynesian navigation

POLYNESIAN SEAFARING AND NAVIGATION; OCEAN TRAVEL IN ANUTAN CULTURE AND SOCIETY. Richard Feinberg. Kent State University Press, Kent, Ohio, 1988, \$30.00, hardcover.

Anthropologist Richard Feinberg of Kent State University continues his study of Anutan culture and society with this latest and worthwhile issuance on island seafaring and navigation. (I reviewed his *Anutan Concepts of Disease: A Polynesian Study in Micronesia* 16: 365, 1980.) At the time Oceania was opened to the awareness of the western world, anthropologists did not yet exist. Most of the early observers of the then pristine island cultures were untrained, and hence scientific studies of navigation with island outrigger canoes were not made. Many commentaries come down to us today, but these are more romantic than scientific, and they tend to give themselves over to hyperbole and laudation.

Professor Feinberg is comprehensive and thorough in his treatment and covers the process of the canoe construction, outfitting and sailing, with clear narrative enhanced by well chosen black and white photographs. In his chapter on the sociology of sailing he shows very well how the seafaring art and science is integrated into the lives of the Anutan males. His description of the *te vai pa* rite of passage—a young male's first fishing trip—is clear and concise, characteristic of Feinberg's descriptions of such ritualistic and cultural phenomena throughout the book.

Personal descriptions of various involvements which the author has had with his subjects abound in the book and this not only helps to validate or clarify scientific observations, but it also establishes Dr. Feinberg as a sensitive member of that community of anthropologists who regard their subjects as humans to whom a special responsibility is due; a responsibility of giving and returning rather than only observing and taking. One can conclude from reading Feinberg that he likes the Anutans and they, in turn, like him.

The book was conceived while Dr. Feinberg was preparing a course for undergraduates at Kent State on Pacific anthropology, thus demonstrating once again the interdependence of research and teaching for the improved quality of academic outputs.

Feinberg makes a good contribution to the literature

and the dialogue over deep sea navigation in canoes. There is a following in anthropology which contends that earlier western observers of the navigation craft tended to overstate the accomplishments of the islanders in their canoes; that in fact the feats of the islanders on the sea were modest and they could not complete voyages of substantial length. Feinberg, by immersing himself in his study, shows how islanders had far more efficient voyaging techniques at their disposal than had previously been thought, and still they occasionally got lost on the sea. The Anutans are not the best navigators or canoe-builders in Polynesia, but their techniques are not markedly different today, Feinberg contends, than they were two hundred years ago; hence a study of Anuta seems valid in the realm of seafaring and navigation.

This is an excellent book on navigation. It is well documented with twenty-five figures and twenty-six plates and has careful notes, appendices, and bibliography. There is an index for quick referencing. With it, Dr. Feinberg reaffirms his eminence as an American anthropologist of Oceania.

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South Pacific scale insects

THE SCALE INSECTS OF THE TROPICAL SOUTH PACIFIC REGION, Part 1, THE ARMoured SCALES (DIASPIDIDAE). Part 2, THE MEALYBUGS (PSEUDOCOCCIDAE). D. J. Williams and G. W. Watson. C.A.B. International, Wallingford, Oxon OX10 8DE, U.K. 1988. Part 1 290 p. \$U.S.57 (paper), Part 2 260 p. \$U.S. 47.95 (paper).

On the tropical islands in the Pacific, scale insects are a major economic group. Still, few entomologists attempt to collect, identify, or study them, particularly the noneconomic species, because of perceived difficulties. Specimens must be cleared and mounted on slides, a time-consuming process, and then identified using keys that are difficult to acquire and which rarely bother to explain or illustrate important mor-

phological details. *The Scale Insects of the Tropical South Pacific Region* provides the first, comprehensive treatment on the scales present in Melanesia and Polynesia. In addition, the authors go one step further by attempting to produce a series of books partly aimed at encouraging non-specialists to identify and study scales. To do this, they have provided descriptions and illustrations of almost all of the species included in the keys, reference figures illustrating most of the major morphological characters, and keys to all genera and species covered in the book. These features will be a great aid to non-specialists as there is nothing more discouraging than being unable to interpret a couplet in a key because of undefined vocabulary, non-illustrated structures, or arriving at an identification and not knowing if it is correct because only the name of the species is given.

The first book covers armoured scales or Diaspididae. It covers 124 species and 37 genera. One new genus and 38 new species are described. The second book covers the mealybugs or Pseudococcidae. It includes 92 species and 37 genera, including three new genera and 28 new species. Both books contain keys to all of the genera and species. The books include a discussion of some of the more economically important species, a short introduction to the morphology and taxonomy of the scales, and a list of scales by host plant. Distributions, hosts, and parts of the host attacked are given along with the descriptions. Most of the more important characters used in scale identification are illustrated and discussed, although in some cases more details would have been useful for non-specialists who have not had any exposure to scale taxonomy. For example, named illustrations of the different types of setae would be helpful. Methods for preparing armoured scales and mealybugs for mounting on slides are presented, but are much too brief. Preparation of good specimens is crucial for accurate identification. Non-specialists will have trouble attempting to identify poorly cleared, improperly mounted, or badly stained specimens. A little more emphasis on this section, including collecting and preservation methods, would have been space well spent.

For the mealybugs, detailed descriptions and illustrations are given for almost all species. Only the genus *Planococcus*, which is under revision, lacks species descriptions, although figures are provided. The authors feel the reader should be able to identify species of *Planococcus* from the key. However, for two of the species, *P. citri* and *P. pacificus*, this may be difficult since one of the characters presented in the key is not obvious on the illustrations. These species

are extremely difficult to separate and more comments on differences would have been useful.

Most of the armoured scales are also described and illustrated, although descriptions for certain cosmopolitan or less important species may be brief or lacking. Users will have to rely more on the illustrations to verify identifications, but this is not an important drawback since the armoured scales are generally more easily identified than mealybugs. Many of the illustrations also contain drawings of the scale cover. This is a useful aid for non-specialists attempting to learn to recognize scales in the field.

The keys are relatively easy to use, more so than most of the keys in other taxonomic works I have used. The terminology and characters used are those in standard use. Descriptions of cosmopolitan species, in conjunction with figures, generally have sufficient detail to alert the reader if a mis-identification has been made.

These books fill a gap in the knowledge of the scales in the South Pacific region. The work is scholarly and the overall quality of the descriptions and plates is excellent. The inclusion of plates and descriptions of previously-described species makes the work of general reference value and will aid entomologists attempting to use other taxonomic works. Many of the species covered are present in the Micronesian area, or are cosmopolitan, so the reference is valuable for use outside the South Pacific region. The reader must be aware, however, that this is a taxonomic work and the keys and descriptions contain a substantial amount of specialized vocabulary associated with scale morphology. Some training in scale morphology may be necessary for some users. For individuals involved in quarantine identifications, or entomologists interested in working with scales, these will be useful references and money well spent. I, along with the authors, hope they will encourage more work with scales in the oceanic Pacific.

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Monitor lizard

GRAY'S MONITOR LIZARD. Walter Auffenberg. University Presses of Florida. Gainesville. 1988. 419pp. \$39.00 cloth.

It is a rare event when a reviewer is both inspired and humbled. Such is my case in this review. After a