

BOOK REVIEW

All things come to those who wait including, nowadays, almost every worthwhile book in a paper backed edition. 'The Forest and the Sea' started life in a hard cover; now it appears, well printed, at sixty cents as a Mentor Book (New York: New American Library, 1961, 216 pp.).

The importance and pleasure of this textbook of ecology are in no way diminished because most of the ideas, examples, and conclusions are not original, although it is fair to say that the best writing is in the author's references to his own experience in Albania, Colombia, central America, the south Pacific, and the West Indies. In a useful summary by chapters, nearly 70 sources are given, of which Bates remarks wryly that he has ". . . tried to observe the faint boundary between research and plagiarism . . ."

In fact much of the material is thoroughly familiar or even elementary, and for this the author rightly makes no apology. Essentially he has written an introduction to ecology, and it is the distillation of ideas with examples that is important. The book represents the content of an undergraduate general education course, "Zoology in Human Affairs," at the University of Michigan where Bates is a professor. Often one is aware of the author speaking, generally in the first person, as a wise, experienced biologist, giving his personal views to second-year students. The writing is discursive, eminently readable and

never pedantic. In passing he raps the knuckles of professional ecologists for their addiction to coining words.

The title is from an interesting if not very useful analogy developed at some length, between the various layers of the forest and the sea, from the treetops or surface, to the floor or benthos. But the forest discussed, despite a conifer on the jacket, refers to mature, equatorial rain forest, such as most of us will never see.

The author refers to insects with authority, having worked for 25 years on malarial and yellow fever mosquitoes. Using an example of *Anopheles* in Albania, he presents a good discussion of speciation. From a single species, according to conventional taxonomy, no less than 7 non-interbreeding populations were sorted out, separable only by spots on their eggs and different tastes in hosts.

Bates makes a good case for more emphasis on what he calls 'skin-out' biology, the study of organisms as such, rather than 'skin-in' biology, the study of organs, cells and processes. The last few chapters deal with the evolutionary background and ecology of man, and the book ends with a plea for more intelligent conservation and better understanding of biology as a whole.

'The Forest and the Sea' should be required reading for ecology students, recommended reading for students of ecology.

—H. R. MacCarthy.



Printed by The Vernon News Ltd.