

the biological effects of the factors considered. There follows a 48-page section on population ecology (intraspecific relationships). The next 100 pages treat interspecific relationships, the community, and succession and fluctuations. Trophic levels, productivity, and the ecosystem concept are taken up in the final 42 pages.

I would call the balance among the major elements adequate, since balance in an ecology course is largely a matter of personal leaning anyway. I regretted some missed opportunities to offer concrete examples of physiobiological interplay—there are not enough animals in the book to satisfy me. There are a number of statements with an oddly anthropocentric cast, especially in the preface; and some may believe that there is a disproportionate use of examples from the marine environment. Such criticism as this is mostly personal bias, and so, perhaps, is my notion that the idea of the life-web should have been developed at the earliest possible opportunity, and that the section on the community should have been expanded, because the community is the smallest closed interspecific system and the best place in an ecology course to show the reality and intricacy of life-web operations.

The book is admirable in its general rejection of the dreadful jargon of ecology. A disappointing feature is the failure to pare, integrate, and set logical bounds to the intractable subject treated. The execution or reproduction of a few of the illustrations is inferior. Otherwise the book is sound and informative and reflects the wide experience of the author and his long conviction that there really is a teachable ecology of the land, sea, and fresh waters.

ARCHIE CARR

Department of Biology, University of Florida

Der Scharlach und seine Behandlung. W. Pulver. Hans Huber, Bern-Stuttgart, 1954. x+209 pp. Illus. Paper, DM 19.80.

This thoroughly documented volume, by the chief of medicine at the Kantonsspital of Lucerne, reviews the complex problem of scarlet fever and its treatment and reports Pulver's experience in treating more than 700 cases of scarlet fever with penicillin during a period of eight years. Basing his conclusion on the successful results obtained with penicillin, Pulver emphasizes the paramount significance of group AB-hemolytic streptococci in the etiology of scarlet fever. Treatment with penicillin leads in a few days to the disappearance of the organisms from nasal and pharyngeal swabs, and most cases of scarlet fever take a much milder course.

The author believes that scarlet fever serum should be employed only in very severe and moderately severe cases in combination with penicillin. In such cases the serum is employed as an antitoxin. According to Pulver, the most recent type of depot penicillin—he refers specifically to Bicillin—has simplified and improved the treatment of scarlet fever. He deals extensively with the prevention and successful treatment of the complications of the disease by

means of penicillin. Noteworthy is his conclusion—this treatment reduces not only the complications caused by bacteria but also sequelae resulting from allergic reactions. A prerequisite for success is early and active treatment with penicillin over an adequate period. Treatment should be coupled with strict isolation.

Although the American reader will not find anything remarkably new in this volume, it does offer a good picture of progressive thought and practice concerning scarlet fever in the German language area. The author has collected a bibliography of 520 references that will be useful to anyone interested in the subject. There is also a subject index.

GEORGE ROSEN

School of Public Health, Columbia University

The Psychological Variables in Human Cancer.

Symposium presented at VA Hospital, Long Beach, Calif., 23 Oct. 1953. Joseph A. Gengerelli and Frank J. Kirkner, Eds. Univ. of California Press, Berkeley, 1954. 135 pp. Illus. \$3.

This is the report of a symposium presented at the Veterans Administration Hospital in Long Beach, Calif., at which were presented and discussed six papers having to do with the effects of emotional attitudes on the genesis of cancer or the longevity of cancer patients. Three papers present theoretical considerations, one presents case material anecdotally, and another presents work in progress, but not sufficiently advanced to permit conclusions, on autonomic functions in neoplastic diseases.

The major presentation, "Results of the psychological testing of cancer patients," by Eugene M. Blumberg, reports work done to test the clinical hunch of Frank Ellis and Philip West that longevity and responsiveness to treatment are related to psychological factors. A group of 50 patients with miscellaneous advanced cancers were studied by means of the Wechsler-Bellevue, the Minnesota Multiphasic Personality Inventory, and Rorschach tests. By the use of certain scores of the MMPI, Blumberg concluded that

... characteristics of the fast cases are greater defensiveness, more anxiety, and less ability to release tensions through motor discharge, either verbal or physical, when compared to the slow cases. Defensiveness is representative of the patient who is motivated to appear "good" and refers to his motivation to give an impression that he is less disturbed than he really is. . . . The fast cases show an inability adequately to defend themselves against anxiety or successfully to reduce their tensions through action.

There are many points of question in this paper.

- (i) It is "76 percent accurate" in prediction for "fast cases," but only 54.5 percent accurate in slow cases.
- (ii) No attempt was made to control the inherent variations of behavior in cancers of different sites.
- (iii) The antichymotrypsin and antirennin relationship in the blood serum is by no means generally accepted as an accurate indicator of disease activity.