1961 a work by R. F. Hecker, entitled *Bases de Paleoecologie* (Editions Technip, Paris, 1960). It is No. 44 of the "Annales du Service d'Information Géologiques," sponsored by the Bureau de Recherches Géologiques et Minières. (The publishers are at 2, rue de Lubeck, Paris XVI.) It is of course the same work, and the accuracy of both translations is sufficiently attested by comparing the English and the French (translators from Russian to English presumably not needing a French trot, as I would). Needless to say, Hecker (1960) is not cited by Hecker (1965).

One expects a commercial publisher to be disingenuous, but the august sponsorship of the English edition raises disturbing questions. Did the sponsors—all of them—simply overlook the French edition? Or do they believe American geologists can read no language but their own?

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Body Composition

Human Body Composition: Approaches and Applications (Pergamon, New York, 1965. 323 pp., $12), edited by Josef Brožek, is a collection of papers presented at an international conference held in London (August, 1963); the volume is organized in three sections: Approaches; Applications in Normal Man; and Applications to the Study of Disease. For the benefit of those who have not followed the growth of interest in this field during the past 25 years, it should be explained that, in the lexicon of the investigator group principally responsible for this advance, body composition has a special meaning. Like Jack Spratt and his wife, these investigators concern themselves mainly with the "fat" and the "lean." A variety of ingenious methods, including (i) techniques for determining specific gravity, (ii) use of skin-fold measurements, (iii) comparison by scoring the results of radiographic examinations, (iv) dilution of body water with tritium or deuterium oxide, and (v) use of potassium-40 measurements made in shielded, total-body counting facilities, have been invoked to give information on fat-free weight, body fat, and lean body mass.

This volume reports the results obtained by using these methods to test such biological parameters as sex, growth and aging, effects of exercise, nutritional abnormalities, and degenerative disease. Each section begins with a review written by the editor, Josef Brožek. Indeed, Brožek writes one-third of the book. However, since he is knowledgeable and speaks with authority, the book benefits substantially from his contributions. There is material that will interest scientists from a variety of professional disciplines: anthropology, psychology, biochemistry, agriculture, physiology, physical culture, internal medicine, pediatrics, and anatomy.

As a physiologist, I found the following contributions particularly stimulating: (i) the description and discussion by Widdowsen (who is not of the Jack Spratt school) of the results of chemical analysis of complete fetal, infant, and adult cadavers; (ii) the thoughtful paper in which Durnin considers somatic standards of reference for such physiological variables as energy metabolism and arrives at what must have been an unpopular conclusion that body weight is the best simple reference at present; (iii) Passmore's discussion of body stores of fat, carbohydrate, protein, water, certain electrolytes, and selected vitamins with a consideration of survival time under circumstances of possible daily loss rates of each material and no intake; (iv) and several papers that report use of the multiple dilutional (isotope injection) techniques, pioneered by Moore, used to define body compartments such as intravascular phase, extracellular water, and intracellular water, and to estimate fat-free body, total body fat, and skeletal weight.

In general the level of writing is excellent, with the exception of two brief papers that are cryptic and poorly organized. A quite complete list of literature references is provided. Altogether, the book presents itself as a first-rate review of the considerable strides that have been made in this field. The gaps in information are understandable because of the great technical difficulties encountered in attempting to find out what goes on inside man without destroying the living organism. Those who believe that the proper study of mankind is man will want to add this book to their scientific library.

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Botany

Weeds of the Northern United States and Canada (Warne, New York, 1965. 254 pp., $3.95) by F. R. Montgomery is an attractive and compact book that is suitable for use in the field. It provides descriptions, habitat, and general distribution of approximately 340 plants. Some 58 additional plants are listed as cultivated escapes or occasional weeds in certain areas, but are not discussed. The majority of the plants described are introductions from Europe or Asia but are now naturalized and widespread across Canada and the northern United States. All the provinces of Canada and all the States north of the 36th parallel, except California, are covered.

The lifelike drawings, in scale, of about 255 plants will be a great aid in identification. The fact that each drawing is placed on the page opposite its description or on the page with the description adds considerably to its usefulness. Unfortunately a number of the illustrations are poorly reproduced. Parts of some drawings are faint to almost indistinct, particularly the leaves.

The simplified identification keys have explicit directions for their use. The flowering families are first separated into four groups, based on leaf arrangement. This is a definite improvement over flower color, the character very commonly used in the flower keys of popular books. Another unusual feature, except in manuals, is a key to the weeds in each family (where more than two genera belong in the same family). These keys are found throughout the text at the beginning of the family. In general, the identification value of keys to a small number of plants from a total of several thousand plants present is debatable, but these keys also add to the descriptions.

This book, written in easily understood terms and intended for laymen, is highly recommended to anyone who is interested in knowing the common uncultivated plants that grow all about us—in gardens, lawns, vacant lots, paths, city streets, roadsides, orchards, and on croplands, for example. The wide distribution of the plants described, the consistent use of their scientific names, and the accurate (if brief) descriptions make this book also a very quick and useful reference for taxonomists. In addition, owing to the excellence of the keys, particularly for