

service rivalry, and Presidential ineptitude are not remedied simply by larger appropriations.

Although he is sharply critical of American foreign policy since World War II and calls for a radical transvaluation of our whole value system, Spanier's account of American performance on the new world stage is anything but a record of failure. To be sure, he repeats the usual *post hoc* arguments about our political innocence in pulling back from Eastern Europe, in leaving Germany divided and Berlin an island in a communist sea, and in demobilizing our vast army before a political settlement had been reached, as well as about the other "blunders" that a "realistic" diplomacy of force might have avoided. But all this is what FDR used to describe as an "iffy" argument. Could we in fact have done anything to "free" Eastern Europe, including Germany and Berlin, without continuing the war—this time against our quondam ally, the Soviet Union? Did the demobilization of our Army in fact create a power vacuum in Central Europe, and if it did, what difference did it make? The Russians, by and large, did not in fact advance significantly beyond the lines they held at war's end. Was not Russia so weakened by the destruction of her economy and the loss of manpower that, while she could hold what she had, she was in no position to do more?

Foreign Policy Record

I would not argue that American foreign policy since World War II has been an unblemished record of success. Nor would I defend the diplomacy of "Brinkmanship," "Massive Retaliation," or "Liberation" rather than "Containment." But the Japanese treaty, the Truman doctrine, the Marshall plan, and even the Korean War, to mention but a few items in the record, represent achievements of no mean proportions in defense of our national interest. To be sure, these and other policies have not been unmixed with liberal notions about "peace," "generosity," and "friendship," but neither are they the policies of a nation suffering from an excessive fear of power.

In addition to our failure to understand and to play the game of power politics, Spanier chides us for failure to understand "the anti-colonial revolutions of the underdeveloped nations." The real issue here, he says, is "whether the United States can supply the new nations with the capital funds and with

a social message that can compete with the appeal of Communism." It would seem that our liberal tradition and our own revolutionary heritage should stand us in good stead as we confront the "revolution of rising expectations and national independence" that is sweeping through Asia, Africa, and the Middle East. But this, too, will call for a tough appraisal of the extent to which the democratic values and democratic institutions of a "People of Plenty" are exportable to "People of Poverty and Illiteracy," with little or no experience in either politics or administration. The wrong answer to this question may well be the Achilles heel of American foreign policy in the 1960's.

Spanier's analysis and his argument as to what must be done pose a challenge to every literate American. Must we abandon the liberal and humane values which have been our heritage to achieve security against communist infiltration, subversion, and conquest? Must we, in a word, lose our souls to save our skins? I think not.

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Trends in the American Economy in the Nineteenth Century. A report of the National Bureau of Economic Research. Princeton University Press, Princeton, N.J., 1960. xi + 780 pp. \$15.

This book fills a major need in the field of United States and Canadian economic history. The result of a joint effort by the National Bureau of Economic Research and the Economic History Association, the volume contains the most comprehensive and careful measurements yet made of the quantitative aspects of economic growth in Canada and the United States since 1790. Eighteen monographs, with critical commentaries, present new or improved statistical series covering the main trends in output growth, prices, income by sectors, factor payments, investment, and the balance of payments. These series tie in with contemporary series in national income, prices, wages, and so forth; hence, the volume makes possible reasonably accurate historical comparisons, in some cases for the first time.

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A Manual of Common Beetles of Eastern North America. Elizabeth S. Dillon and Lawrence S. Dillon. Row, Peterson, Evanston, Ill., 1961. 844 pp. Illus. \$9.25.

This manual is the first of its kind on the largest group of animals, the Coleoptera. To be sure, there are manuals for general beetle collectors, but they are either too incomplete for reasonable accuracy or too bulky and technical for easy use. The Dillons' book strikes a happy medium. Keys identify some 1200 common beetles found in eastern North America. There are illustrations galore (544 of body parts) and 85 plates (four in color) of 1177 habitus drawings of species. If the user keeps in mind the fact that not all known species are included, he should find this book very useful, for never before has it been made so easy to identify beetles in the area concerned.

The introduction is a short discourse on the anatomy of beetles, collecting and preserving, and larvae. A chapter on ecology gives short accounts of the many environmental situations in which beetles are found; this chapter should suggest places for beginners to collect specimens. A key allows determination of 64 families and contains illustrations of body parts that might cause trouble for the user. The major part of the book, 85 percent, is concerned with each family and its species. Each family is briefly discussed; then keys to species are given. For convenience the many illustrations of difficult characteristics are placed very near the couplet concerned. Each species is described, and the habitus of each is illustrated on a plate. Finally, there is a glossary, a list of important technical articles, a list of faunal lists, and an index.

There is not much to criticize, but one serious fault is the use of many incorrect generic and specific names. These errors are unfortunate, and could easily have been avoided by consulting current catalogs or revisions. Some of the illustrations of body parts could be confusing: a line just inside the border indicates either a sulcus (Fig. 211) or convexity (Fig. 108). I have not made a search for errors, but one mistake in the key to families could cause some trouble: on page 39, couplet 18, Trogidae actually has closed mesocoxal cavities, whereas Scarabaeidae has open cavities (the figures referred to are correctly labeled).

It is my hope that this book will be shown to every undergraduate biology

student in our colleges and universities. Then perhaps interest in beetles would become commensurate with the numbers of species. I think this manual could arouse such interest. It would get the student over the first discouraging stumbling blocks: numbers of species, complexity of terms, and the great variation of form. Perhaps it is the wealth of illustrations that makes the volume a fine manual. And you can bet that a lot of experienced coleopterists will be flipping those 85 plates when trying to identify specimens in groups outside their specialty. *Caveant Coleoptera!*

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Holzanatomie der Europäischen Laubhölzer und Sträucher. Pal Gregus. Akademiai Kiado, Budapest, Hungary, 1959. 330 pp. + plates. Illus.

This large and thorough volume constitutes a major contribution to the literature on the identification of wood and woody species on the basis of xylotomy. It is a presentation of photomicrographs, diagnostic pen and ink sketches, detailed xybotomical descriptions, summary tables of characteristics, and keys to the identification of European deciduous trees and shrubs based on the structure of their wood. As such, it is a revised and enlarged edition of the author's successful *Bestimmung der mitteleuropäischen Laubhölzer und Sträucher auf xybotomischer Grundlage* which is now out of print.

The book is divided into a general section which treats the preparation of material and the fundamentals of the xybotomical determination of woody species, and a detailed section which treats 154 genera of 61 families of the Monochlamydeae, Dialipetalae, and Sympetalae. The detailed section is divided into an expanded key to species and a thorough description of the anatomical features of the wood of each species treated. It is followed by 307 plates (9 by 13 inches) of photomicrographs and drawings of the 303 species treated. Six summary (*Merkmalsübersicht*) tables are included inside the back cover of the volume.

The diagnostic key is presented in both German and English and uses both qualitative and quantitative characteristics. It is elaborated to include minor variations within species and specimens; I found it to be quite workable.

The descriptions of the xybotomical features of the wood of each species are presented in German, but they can be readily translated by anyone who has a command of the basic German vocabulary of wood anatomy. The features of cross, radial, and tangential sections are presented in great detail.

The plates are large and exceptionally well done. Each plate shows four photomicrographs (2 by 3 inches) and a series of pen and ink sketches of diagnostic features. The photomicrographs include a cross section ($\times 30$), a cross and a tangential section ($\times 100$), and a radial section ($\times 200$). Where applicable, pen and ink sketches are given of vessels, tracheid shaped vessels, tracheids, wood fibers, fiber tracheids, wood parenchyma cells, ray cells, supplementary fibers, and septate fibers.

This volume, along with its companion, the author's *Identification of Living Gymnosperms on the Basis of Xylotomy*, will provide data and fill a need in the several areas of plant science concerned with wood and woody plants. It provides a comprehensive view of the structure of woody plants, for general botanical purposes. It serves as an exhaustive source of data for advanced study of wood anatomy and its relationship to phylogeny. Finally, it provides a comprehensive reference manual for workers in the fields of plant anatomy, wood technology, forestry, paleobotany, and related areas.

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Staining Methods. Histologic and histochemical. J. F. A. McManus and Robert W. Mowry. Harper (Hoeber), New York, 1960. viii + 423 pp. Illus. \$10.

At a time when the value of the information that can be derived from studying cells and tissues has been generally recognized by many disciplines, a book "integrating the newer methods of tissue and cell examination into histologic techniques" is highly welcome. The authors present here a selection of the methods they consider to be most valuable for the proper staining of histologic preparations. The selection, based on the authors' personal experience with the different techniques, includes well-established earlier procedures as well as newer methods—for

instance, staining techniques used in electron microscopic studies which have recently been improved by Strüger, who applied additional "staining" with uranium salts for the detection of microstructures in cell constituents.

A discussion of the different methods of preparing the tissue for staining precedes the chapters on specific methods for study of the constituents of cells and tissues and for the study of special cells, tissues, and organs. Two appendixes—one giving an outline of basic techniques and another giving dilution and solubility tables, molar values, and buffers—increase the monograph's value for routine work and research.

The book continues the tradition of the famous standard works by Mallory, Bertrand, Lillie, and Glick, to mention just a few of the earlier and the more recent authors, and it will definitely fill the need of a modern tissue laboratory.

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Miscellaneous Publications

(Inquiries concerning these publications should be addressed, not to Science, but to the publisher or agency sponsoring the publication.)

Large-Scale Ground-Water Development. Water Resources Development Centre. United Nations, New York, 1960. 84 pp. Paper, \$1.25. The first of a series of studies to be undertaken by various UN organizations. Contents cover basic considerations relating to use, stages of development, economic and financial aspects, the role of governments, and rights and other legislative matters.

Research in Wisconsin. A technical digest of research results in fish management, forestry, and game management, 1959. Ruth L. Hine, Ed. Wisconsin Conservation Dept., Madison 1, 1960. 104 pp.

Scientific and Technical Personnel in American Industry. Report on a 1959 survey. Prepared by the U.S. Department of Labor. National Science Foundation, Washington, D.C., 1960 (order from the Supt. of Documents, GPO, Washington 25). 66 pp. \$0.45. American industry employed approximately 800,000 scientists and engineers in January 1959. Engineers were found to number 615,000 (80 percent of the survey); the 149,000 scientists included 72,000 chemists, 18,000 life scientists, 15,000 physicists, 15,000 earth scientists, and a smaller number in other occupational groups.

Soviet Education Programs. Foundations, curriculums, and teacher preparation. Bulletin 1960, No. 17. William K. Medlin, Clarence B. Lindquist, and Marshall L. Schmitt. U.S. Office of Education, Washington, D.C., 1960 (order from Supt. of Documents, GPO, Washington 25). 299 pp. \$1.25.