

Those who know Mr. Yard's able services as secretary of the National Parks Association and his valuable books on national parks will look to the chapter on that topic for the last word on the subject and will not be disappointed. It presents the best and most complete picture of the situation yet given. The standards, history, uses and development of national parks, the attacks upon the system and its public value are discussed with a frankness and breadth of view that make the account of special value just at this time when so many proposals for new projects mostly of local worth are being insistently urged upon the attention of Congress and the American people.

The chapter on "National Monuments" brings up another type of land area not clearly defined in the public mind and points out the need of study to formulate a proper system for the development of all such areas and a plan for the protection of each type so that its fundamental purpose may be most fully realized. Certain areas now labeled national parks certainly do not meet appropriate standards as such. National monuments have clearly a different character and purpose. And there are some areas not possessing the qualities of either group that are undoubtedly worth setting apart for the use of the people as recreational areas in which far greater freedom of action may be allowed the public without endangering their value than is possible in national parks or national monuments. National parks are discussed under Merriam's apt designation as a super-university of nature; national monuments constitute a lesser outdoor national museum; recreational areas provide the nation's playground. The account sets forth well the part played by different agencies, including the American Association for the Advancement of Science together with various other organizations, in formulating and establishing these standards first enunciated by distinguished leaders in public life. Despite what has been done, the system is still imperfect, and conflicting views between different government bureaus and departments need definite and early adjustment in the public interest. The reading of Mr. Yard's book shows clearly the heterogeneous character of the areas grouped under these headings and the dangers impending in the near future if readjustments are not made.

Another and pressing aspect of the situation is brought out vividly in the chapter on the "Depletion and Rescue of Our Amazing Heritage of Wild Life." The formation of refuges, which must be extended greatly in the immediate future, introduces a type of wilderness area demanding new methods of selection and maintenance. The movement for such refuges is very new but its influence has grown powerful within

a brief period. It can not be overlooked in the necessary and impending coordination of government areas and the development of conservation policies.

In the last chapter on "Half a Century of Nature Conservation," the author has brought out the essential character of the movement which led to the National Conference on Outdoor Recreation, called by President Coolidge in 1924, and the new era which was ushered in thereby. Roosevelt laid the foundations of the conservation movement; Coolidge built the first story. It remains for the future to complete the structure. Yard points out here with vividness lines of future growth and future danger.

The book has covered a large and unbroken field with success. It is readable and dependable despite the inclusion of a few errors. It is well printed and beautifully illustrated by fifty well-chosen full-page plates. Another edition will devote more space to wild life and its protection, a topic which, left to the end, was cut off somewhat abruptly in comparison with other chapters.

There is especial reason to read the book now when shrewd politicians and promoters are bombarding Congress with schemes for "utilizing" national resources, creating a dozen new national parks mostly as amusement resorts for local gain, and consenting sacrificially to use parts of old parks for the good of the people, or their part of it. Remember that these lands are "Our Federal Lands," and should be preserved both from expropriation and from despoliation. This can not be done unless the problem is understood and the work carried out intelligently. Mr. Yard has done the nation a great service in his long and exhaustive study of the situation and in his clear and effective presentation of the facts in this volume. To keep these lands for the people is the problem of to-day.

HENRY B. WARD

UNIVERSITY OF ILLINOIS

*Pflanzensoziologie; Grundzüge der Vegetationskunde.*  
By DR. J. BRAUN-BLANQUET. Mit 168 Abbildungen und 330 Seiten. Biologische Studienbücher VII. Herausgegeben von Walther Schoenichen, Berlin. 1928.

THE author, who is connected with the botanical institute of the University of Montpellier in southern France, has had unusual experience in the study of vegetation from the modern ecological standpoint. He puts together in attractive and readable form the results of his own work, as well as those of his ecological colleagues the world over. The book shows that the author has kept intimately in touch with the advances made in the particular field of botany covered by the text.

The preface describes the place occupied by plant sociology in the biological system. Section one, part 1, deals with the principles underlying the grouping of plants into societies, the commensal life of plants, their struggle for existence and similar matters. The second section gives in detail the methods adopted by the ecologist in the investigation of vegetation. Part 2 of this section treats of the climatic factors, such as heat, light, water, wind, soil (chemical and physical characters), relief, the influence of man and animals and life forms.

The third part considers in detail the development of vegetation complexes, the methods of their study, their classification; while the fourth part in twenty pages describes the geographical distribution of vegetation as to zonation, pioneer and relict groups, regions, provinces, districts, etc. Part 5 is devoted to the distribution and arrangement of the plant associations (association systems). The photographs, graphs and line drawings used to illustrate the book are new and well chosen.

JOHN W. HARSHBERGER

UNIVERSITY OF PENNSYLVANIA

## REPORTS

### VITAMIN B TERMINOLOGY

IN SCIENCE of August 31, 1928 (Vol. 68, No. 1757, pages 206-209) was published a summary of the various proposed systems of vitamin B terminology then under consideration by the committee on vitamin B nomenclature of the American Society of Biological Chemists.

The various proposed systems of terminology eventually narrowed down to three, which seemed in the minds of the committee to be most likely to satisfy the majority of workers in the field of vitamin research.

Summarized briefly, the three systems of terminology were as follows:

(1) *The British suggestions.* The British investigators recommended, as a temporary expedient, that the letter "B" be used to designate the complex, "B<sub>1</sub>" to identify the heat-labile factor, and "B<sub>2</sub>" to refer to the heat-stable factor or factors.

(2) *The Sherman suggestions.* Dr. Sherman suggested that the term "B" be used to refer to the complex with the hope that it would eventually receive "honorable retirement" and that the letters "F" and "G" be used in a permanent system of nomenclature, in place of "B<sub>1</sub>" and "B<sub>2</sub>," respectively, which had been adopted as temporary terms by British workers.

(3) *The McCollum suggestions.* Dr. McCollum, for reasons enumerated in the former committee report, sug-

gested that the term "B" be retained but restricted to refer to the heat-labile factor, and that Sherman's "G" be used to designate the more heat-stable factor.

After considerable correspondence the committee have voted to make the following recommendations:

(1) That the term "Bios," as suggested by the British workers, be retained to denote the factor or factors encouraging the rapid growth of yeast cells.

(2) That the term "B" be restricted to designate the more heat-labile (antineuritic) factor.

(3) That the term "G" be used to denote the more heat-stable, water-soluble, dietary factor, called the P-P (pellagra-preventive) factor by Goldberger and associates, and which also has to do with maintenance and growth.

(4) That the naming of newly discovered dietary factors, by other than descriptive terms, should be discouraged until their identity is established beyond question.

(5) That a committee on vitamin nomenclature be appointed by the American Society of Biological Chemists and that this committee, in cooperation with the British committee and similar committees on the continent, endeavor to act as a clearing-house for questions in vitamin terminology, and that this committee be empowered to name new factors when their identity is established.

ATHERTON SEIDELL,

H. C. SHERMAN,

P. A. LEVENE,

HARRY STEENBOCK,

E. V. MCCOLLUM (*ex officio*),

R. ADAMS DUTCHER (*chairman*),

*Committee on Vitamin B Nomenclature,  
American Society of Biological Chemists*

## SCIENTIFIC APPARATUS AND LABORATORY METHODS

### AN IMPROVED METHOD FOR SEALING MICROSCOPIC MOUNTS

THE preparation of biological material as permanent microscopic mounts in certain fluid media is of very general interest. None is more desirous of such permanence than the taxonomist, to whom microscopic characters are of prime importance. The slow and laborious processes commonly used are so unsatisfactory that the writer feels justified in presenting a new method thought to possess certain advantages. This method is described after a short review of some current practices. The subject is considered from the viewpoint of the herbarium mycologist but has also a more general application.

A proper comparison of any specimens in a mycological herbarium requires detailed microscopic ex-