

# Book Reviews

## Monographs on Vegetation

**The Vegetation of North and Central America and of the Hawaiian Islands.**  
Rüdiger Knapp. Fisher, Stuttgart, 1965 (in German). xl + 373 pp. Illus. DM 58.

This volume by Rüdiger Knapp is the first in a new German series entitled, "Vegetation Monographs of the Individual Continents or Macro-Regions." H. Walter is editor of the series.

Knapp's book is a masterpiece of organization. The table of contents is given in German and then in English. In 13 tightly printed pages it covers 322 pages of text. This represents an extremely thorough breakdown of a rather complex subject into a large number of logically arranged discussion sections. In this way, the book allows rapid access to specific areas and questions, even by a reader with only a cursory knowledge of German. The literature citations extend over 40 pages with representation of about 1000 authors (and 3000 to 4000 publications), among which not more than ten authors are German (and about 50 publications). In addition, 72 floristic references are cited. A list of synonyms and a subject index are provided.

At first, the book may appear to be a refined abstract of the North American literature on vegetation, but the author has invested his own well-documented experience to the fullest extent by giving the book his personal character. This is shown in the introduction and by the general pattern followed in each of the ten chapters. The emphases are strictly those of the author; they are extremely meaningful, down to the detail of species order and symbolism in the plant lists that follow each vegetation type description.

The introduction begins with a discussion of vegetation and climate relationships. Consideration is then given to the history of the American vegeta-

tion within the context of the major floristic regions. A special section is devoted to the influence of fauna, and another to that of man, on vegetation. The remaining nine chapters deal in sequence with the different geographic sections of greater North America. Here the treatment of vegetation zoning extends from East and Southeast North America to the boreal and arctic vegetation; then to the West and Southwest; and from there to the prairies in Central North America (a special chapter deals with deserts and semideserts); then follows a chapter on the vegetation of Southern North America and Central America, and finally one on the vegetation of the Hawaiian Islands.

The chapters have a variable number of subdivisions, for the subdivisions are based on the peculiarities of each region. However, a certain general pattern is set: forest communities, shrub and herbaceous communities on non-extreme soils, then edaphic-extreme communities—such as the vegetation of sand dunes, salt marshes, bogs, and aquatic communities. In each chapter, a special section on anthropogenic influences precedes a neat list of the authors consulted. Larger chapters are subdivided also by significant geographic or elevational subdivisions.

No life form community of special ecological significance appears to have been overlooked but the many subtitles often suggest content which the sections do not contain. For example, under the section entitled, "Northwestern Pacific Epiphytic Communities" (p. 152), one finds only two sentences of descriptive text, which may be quoted here (free translation): ". . . dense epiphytic vegetation, consisting of pteridophytes and mosses, is found to form on the branches of trees in the most humid parts of the Pacific Northwest. It is often luxuriously developed particularly on the west side of the outer coastal chain." This is followed by a list of five species, but one of the

most important species (*Pseudisothecium stoloniferum*) is not mentioned.

Such information may be sufficient for a glimpse that provides orientation but can hardly serve more. Here it would have been well to consult the work by Szczawinski, "Corticolous and lignicolous communities" (Ninth International Botanical Congress, 1959). Such omission of significant literature is characteristic of the treatment provided for the three areas with which I am familiar (the Pacific Northwest, Central North America, and Hawaii). For example, no mention is made of Krajina's "Bioclimatic Zones in British Columbia" (University of British Columbia, Botany Series, 1959) or of McMinn's study "Water Relations and Forest Distribution in the Douglas-Fir region on Vancouver Island" (Canada, Department of Agriculture Publication, 1091, 1960), of Ritchie's "Soil and Minor Vegetation of Pine Forests in Southeast Manitoba" (Canada, Department of Forestry, Technical Note No. 96, 1961), or of Fosberg's discussion, "Principal terrestrial ecosystems of Hawaii" (Tenth Pacific Science Congress, 1961).

In preparing an up-to-date summary of work on North American vegetation, which, it is implied, one will find in this book, it would have been in order to consult the people who are actively working in each main area, rather than to rely on a literature review or on occasional contact.

Regional emphasis could have included major edaphic controls, such as internal slope seepage in the coastal forests of the Pacific Northwest and stagnating ground water versus vadose water in the boreal forest types. Although it appears undeniable that the life form type communities described match reality, it would have been appropriate to give at least a minimal amount of information on variation within the larger types. For example, the section "Jack Pine Barrens" (p. 83) refers to the jack pine cover type on sandy soil, which in reality includes considerable variation. A separation into at least two equally extensive segments—jack pine sand flats with and without water table influence—would have been in order. The book description fits only the second segment. A similar breakdown into at least two major variations of the Pacific Northwest Douglas-fir forest, the *Gaultheria* component without (or with minor) seepage influence and the *Polystichum* component with continuous slope seepage

influence (after Becking, 1956), would have resulted in a better balance of vegetation units. This omission is particularly unfortunate because minor life form communities—such as rock-crevisse, trail, and lawn communities—are treated in the same breadth as broad, extensive, and more variable cover types, which therefore appear similarly inflexible and well defined.

Thus, the book can serve only on a general orientation level. A treatment of the variation within the more important larger types is essential for use on a working level, whether for management considerations, ecological studies, or both. Vegetation monographs intended for use on a working level would need to be much further restrict-

ed with respect to their geographic scope. *Vegetation of Scotland* (Oliver and Boyd, 1964) is a good example of a monograph on a working level.

Certainly Knapp's book was not intended to provide more than general orientation. This purpose he has admirably accomplished. The book will be extremely useful not only to non-specialists, but also to ecologists in obtaining orientation on areas outside their own particular region. The book, as an outstanding and significant work, should be present in all university libraries and is highly recommended for all persons interested in field botany.

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## Salary with the Fringe on Top: The Ingraham Sampler

**The Outer Fringe: Faculty Benefits Other Than Annuities and Insurance.** Mark H. Ingraham. University of Wisconsin Press, Madison, 1965. xii + 304 pp. \$7.50.

This study of fringe benefits in academia was sponsored by the Commission on Faculty and Staff Benefits of the Association of American Colleges, with the cooperation of the American Association of University Professors and the Teachers Insurance and Annuity Association. Wisely, the author and the Commission chairman decided that this would be a report to the Commission, rather than its official findings and recommendations. As a result, the real Mark Ingraham shows through, and he is someone most readers would like to meet in the flesh. The book has a homey touch, spiced with reminiscences and humor, which illuminates the review of data collected by questionnaires and interviews involving nearly 750 colleges and universities. The Ingraham Sampler includes such quotes as the following: "Salary is a very good way to pay people." "What a horrendous questionnaire it would have been if it had been adequate!" The concentration of power and authority in the hands of the small college president "also makes it possible for a foolish man to foul up a situation in a manner that would be extremely difficult where authority is diffused and the administrative momentum great."

Pensions and insurance programs have been well treated in books such

as Greenough and King's *Retirement and Insurance Plans in American Colleges*; thus, Ingraham concentrates on assorted sweets that are not universal. And what a grab bag it is! Sixty percent of the institutions queried are landlords for faculty families, 15 percent are mortgage brokers, 93 percent of private colleges provide tax-free scholarships in the form of tuition waivers, 75 percent provide emergency medical treatment for faculty members and their families, one-fourth grant personal loans to employees, two-thirds pay moving expenses for appointees with tenure, one-third provide discount purchasing services on appliances, food, and similar items. Others, in varying number, provide family bonuses for children, free lunches and morning coffee, free babysitting services, two-thirds of foreign travel expenses, and run holiday camps for faculty families. More than half of the institutions have regular sabbatical leave policies, and others have informal leave-with-pay arrangements. Six hundred institutions provided a total of 164,000 faculty parking spaces! Some (for example, Princeton) house half their faculty in university-owned property or in houses for which the university has advanced all the money and requires no payments on principal.

Lest the unwary reader be misled, it should be pointed out that no institution provides *all* of these services, but a handy check-list in an appendix shows participation by every institution responding under 11 different major

fringe benefit programs. My preferred list of colleges begins with Amherst and Bard, and runs through Union College (Tennessee) and Williams—but each reader must decide for himself where he will send his job application. If a rough calculation is correct, such benefits may easily add up to six or seven thousand dollars a year (perhaps ten thousand before taxes) for the fortunate family at the right institution and with two children in college simultaneously. The Internal Revenue Service is already reconsidering the tax-free status of tuition waivers, and professors may someday rue the added publicity this book provides.

Ingraham gives a general description of fringe benefits under 11 major headings, gives some details of representative plans, and provides an evaluation and personal recommendation in each category. He personally favors higher salaries rather than tuition waivers for faculty children, feeling that free tuition makes faculty callous about the level of educational charges. He concludes, however, that a seven-to ten-man faculty committee (preferably appointed rather than elected), with minor representation from administration, should advise and counsel the president and board of control on fringe benefit policy. Certainly after reading *The Outer Fringe* many faculties will request additional benefits, some of which would never have occurred to them without such a compendium. Deans and presidents must read this book to be prepared for the onslaught, as faculty committees pore over it looking for new innovations.

The experience of collective bargaining in industry since 1940 suggests that fringe benefits are often easier to win than outright salary increases, and on occasion they may seem relatively costless to decision makers. Trade unionists might profit from reading this illuminating book, for they will discover many a tempting morsel, and employers may find themselves back in the business of running the company store, bank, health center, discount house, finance company, real estate agency, eating and drinking club, and summer resort. What were once the trademarks of paternalism have undergone an amazing transformation. One only wonders what would have happened if the income tax had never been enacted.

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