REVIEWS

Flora of the Queen Charlotte Islands: Part I. Systematics of the Vascular Plants

By James A. Calder and Roy L. Taylor, xiii + 659 pp., illus. \$12.50; and Part 2, Cytological Aspects of the Vascular Plants By Roy L. Taylor and Gerald A. Mulligan, ix + 148 pp., \$7.50. Canada Department of Agriculture, Research Branch, Monograph No. 4, 1968. Available from Queen's Printer, Ottawa.

The Amphi-Pacific segment of the Circumpolar Flora is extremely interesting and complicated since the continents of Asia and America have been linked in the north by mountain and coastal migration highways at one time or another for a very long time. Elements of the Tertiary Flora which have used these highways have surviving close relatives deep in the two continents as far apart as the Southern Rocky Mountains and the Altai-Pamir region of Asia.

The Atlantic aspect of the Circumpolar flora has been well-known and thoroughly studied for over a century, but although the existence of Tertiary connections involving eastern Asia and Eastern North America was discussed a century ago by Asa Gray, the obvious possibility of more extensive floristic connections between Japan and western North America has not been thoroughly explored, at least in the long arc of the Pacific Coast between Washington and Alaska. The Flora of the Queen Charlotte Islands deals with the most significant segment of this gap, which, until the present study, was virtually unknown territory.

The Flora represents a distillation of what must be the most thorough investigation of such an area in recent times, accomplished through team work uniting some of the most competent and critical field botanists it has been my privilege to know. Although Part 3, the Bryophytes, has not appeared at this

writing, this statement can be extended to anticipate the latter survey by W. B. Schofield.

This flora appears at a time when there is intense activity on flora-writing involving the northwestern United States, Alaska, The Aleutian Islands, and Japan – independent studies by students having widely differing geographic and taxonomic frames of reference. The facts are not all in and for some time to come we should expect to endure considerable fluidity in nomenclature of the plants of this vast area, and in specific and generic concepts. Non-taxonomists evidently need to be reminded often that nomenclature is the shorthand which taxonomic scientists use to express their various points of view. Only in a limited sense is one name "right" and another "wrong". Expression of varying viewpoint is the right of every scientist; in fact, to be able to express complex points of view by a binomial is economical as well as useful. To ask the taxonomists to "once and for all get together and stabilize their nomenclature". would be to deny them the right to differ, which is regarded as sacrosanct in all other branches of research. This Flora struggles with the taxonomic concepts utilized by past workers and with those in current use. This is a good sign, for it means that conversations are occurring and old notions are being challenged. We should be willing to wait a reasonable time for stabilization of nomenclature.

One real value of part 1 is that the authors give critical evaluations of the taxa, together with perceptive discussions of floristic ecology, and they present honest discussions of their taxonomic positions where these are too often reduced, in monographs and floras, to mere lists of synonymy. Detailed introductory chapters on history, physiography, geology, climate, economic botany, plant communities and phyto-

geography help to make this an ideal floristic treatment.

European students will find reason to criticize the book for its failure to account for some of their literature. For example, the authors seem to have been unaware of Björkman's work on *Podagrostis*, Hylander's critical studies on the taxonomy and nomenclature of the Scandinavian flora, and others. Although regrettable, a certain amount of provincialism must be allowed floristic writers since their field of bibliographic responsibility is too vast to handle without the computer.

The quality of work and the proficiency of the workers leaves little to be desired. However, it is difficult to understand the division of the book into separate parts, or to understand the rather elaborate use of color in a book with rather limited appeal to the amateur or layman. The color photographs have suffered badly in reproduction.

Without intending to criticize the research accomplished by Taylor and Mulligan, Part 2, in my opinion, is a sheer waste of paper. Its subject matter could have been condensed to form an appendix to the first volume or run directly into the text under the respective taxa. Each of the 568 taxa is listed by name, with ample space above and below the entry, whether a chromosome count was obtained or not. The dust jacket claims that 71% of the taxa were analyzed cytologically. However, most of the counts agree perfectly with earlier ones by other workers in other regions, and most of the discussion simply seems to consist of different ways of saying that this or that count is identical to one reported elsewhere. Surely the cytotaxonomists can find some symbol by which this information could be conveyed. The cytological volume has no illustrations of karyotypes or metaphase plates which would lend interest to this volume.

WILLIAM A. WEBER

University of Colorado Museum, Boulder

Growth and Utilization of Poplars in Canada

By J. S. Maini and J. B. Cayford (Eds.), Forestry Branch, Canada Department of Forestry and Rural Development, Ottawa, Publ. No. 1205. Illus. vii + 257 pp., 1968. Paperback.

The various species of poplar which are found in Canada are a most important economic resource. In February 1967 a symposium was held at Harrison Hot Springs, B.C. to discuss the status of poplar in Canada. All aspects from silvical characteristics through breeding, parasites and utilization were treated. The papers presented have been reproduced in book form together with three additional papers which introduce and give broader coverage to the subject.

Undoubtedly there were many Canadian foresters and other interested individuals who were unable to be present at these meetings, so it is most fortunate that these papers have been reproduced. The information provided will thereby be available to workers in all parts of the world where poplar is an important forest tree. The bibliographies which accompany the papers are for the most part quite extensive.

Of particular interest to the readers of this journal are Chapter 1: Landscape and climate of Canada by J. S. Maini; Chapter 2: Silvics and ecology of *Populus* in Canada by J. S. Maini; and Chapter 7: Insects and diseases by A. G. Davidson and R. M. Prentice. These, and particularly the first and last might be of special interest in biology classes in our schools, but unfortunately will probably never be seen there.



Weber, William A. 1969. "Flora of the Queen Charlotte Islands: Part I. Systematics of the Vascular Plants, by James A. Calder and Roy L. Taylor [Review]." *The Canadian field-naturalist* 83(3), 287–288. https://doi.org/10.5962/p.364139.

View This Item Online: https://www.biodiversitylibrary.org/item/89179

DOI: https://doi.org/10.5962/p.364139

Permalink: https://www.biodiversitylibrary.org/partpdf/364139

Holding Institution

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Sponsored by

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Ottawa Field-Naturalists' Club

License: http://creativecommons.org/licenses/by-nc-sa/3.0/

Rights: https://biodiversitylibrary.org/permissions

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.