

local floras can be more useful than those of the regional manuals in that they simply involve fewer choices, and are often the product of extensive field experiences with the plants in hand.

Following are additional statistics on the flora which might be needed by users of this book. The largest 10 families are (native taxa only): Asteraceae (17.4%), Poaceae (6.8), Polygonaceae (5.8), Fabaceae (5.5), Brassicaceae (4.9), Polemoniaceae (4.8), Scrophulariaceae (4.2), Boraginaceae (3.8), Onagraceae (3.5), Chenopodiaceae (3.4). Of the 125 introductions, 28.8% are Poaceae, and the remainder: Asteraceae (14.4%), Brassicaceae (10.4), Farabae and Chenopodiaceae (5.6), Tamaricaceae and Polygonaceae (3.2). A Life Form Spectrum for native taxa is: Phanerophytes (2.9%), Chamaephytes (16.7), Hemicryptophytes (34.4), Geophytes (11.8), Therophytes (31.4), Eiphytes (0.4), Succulents (2.1). Half of the introductions are therophytes, and a fourth are hemicryptophytes.

The layout of the book is of adequate utility, and is mostly free of printing error. However, taxa are not numbered in the catalogue of plants.

All factors considered, the book appears to this reviewer to be a good contestant in the scramble competition for personal and university library dollars. — DEAN WM. TAYLOR, Department of Botany, University of California, Davis 95616.

*The Story of Pines.* By NICHOLAS T. MIROV and JEAN HASBROUCK. xi + 148 pp., including colored frontispiece, forty halftones, five line drawings and one map. Indiana University Press, Bloomington, Indiana. 1976. \$7.95.

If one chose to write a book for the layman about a single group of plants, what could be more appropriate than a genus containing the oldest known living "higher" plant, the bristlecone pine? But not only are some pine individuals long-lived, the group also has a long geological history. The chapter, "The First 200 Million Years" discusses pines from the Jurassic to the present.

Dr. Mirov has worked with and loved pines for more than fifty years. Readers may imagine themselves chatting with the Mirovs in the study or in front of their fireplace, and hearing, in simple language, about fragrance of pines (one of Dr. Mirov's favorite subjects) — why one species exudes a different fragrance than another; or the legend of how the Black Sea *Pinus pityusa* was named for the Greek wood nymph Pitys; or reminiscences on how geneticists developed the science of breeding pines, a science which had its beginning in 1925 at the Eddy Tree Breeding Station in Placerville, California (now the Institute of Forest Genetics). The chapter on the Pine Forest includes discussion of the ecosystem of which the forest is a part, and also takes up the importance of fire to pines, "Fire never exterminated a pine forest; only climate can do that." [that is if man's activities are excluded].

There is all this "and much much more" — structure, physiology, economic importance, natural distribution of pines in the northern hemisphere and their successful introduction into parts of the southern — all in a welcome, readable style. Aspects of pines that still require research are touched upon and these may intrigue the scientists who pick up this volume.

Anyone who feels the exhilaration of being among pines, whether they be on a coastal plain, on a mountain peak, or in the foothills between, will enjoy this book and will undoubtedly look upon pines with a deepened understanding. — ANNETTA CARTER, Herbarium, Department of Botany, University of California, Berkeley 94720.

*Daleae Imagines, an illustrated revision of Errazurizia Philippi, Psorothamus Rydberg, Marina Liebmann, and Dalea Lucanus emend. Barneby, including all species of Leguminosae tribe Amorpheae ever referred to Dalea.* By RUPERT C. BARNEBY. 891 pp., including 142 plates drawn by the author. Memoirs of the New York Botanical Garden, vol. 27. 1977. \$50.00 (paperbound!).



Carter, Annetta. 1978. "The Story of Pines by Nicholas T. Mirov, Jean Hasbrouck." *Madroño; a West American journal of botany* 25, 110–110.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/185587>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/170745>

**Holding Institution**

Smithsonian Libraries and Archives

**Sponsored by**

Biodiversity Heritage Library

**Copyright & Reuse**

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

Rights Holder: California Botanical Society

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

Rights: <https://www.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>.