

Approximately one-third of the book discusses phytogeography, geology, and soils of the region in addition to a large section titled floristic analysis by habitat. The bulk of the book is an annotated list of species in which data are provided on abundance, occurrence in the county, anthesis and fruiting dates, and whether the species is native or introduced.

This book is a significant contribution to the study of vascular plant distribution in western New York. It is not intended to be a field guide; no

species descriptions or keys are included. The book appears to be well edited although some spelling errors were noted as well as five incorrect page numbers in the table of contents. The reasonable price should ensure wide use both in western New York and among those interested in the flora of the northcentral states.

DAVID A. LOVEJOY

Department of Biology, Westfield State College,
Westfield, Massachusetts 01086

Vegetation of the Soviet Polar Deserts

By V. D. Aleksandrova (Translated by D. Löve). 1988. Cambridge University Press, New York. xxi + 228 pp., illus. U.S.\$49.50.

This short monograph will be indispensable to all botanists, ecologists, and biogeographers doing research in the North American Arctic. In it, Dr. Vera Danilovna Aleksandrova, the Soviet Union's leading Arctic botanist, gives a summary of the work she has done, during a long and distinguished career, on the botany of the Soviet Arctic deserts.

Aleksandrova's definition of "arctic desert" is stringent. In Eurasia, only a tiny portion of mainland, the northernmost tip of the Taimyr Peninsula, is included. For the rest, palearctic deserts are confined to islands in the Arctic Ocean: the Franz Josef Archipelago, the Severnaya Zemlya Archipelago, and a few other small islands, together with the northeastern tip of Novaya Zemlya, and Northeast Land (part of Svalbard). It is worth noting how little of the New World Arctic is desert as she defines it: narrow strips along the north coasts of Greenland and of Ellesmere and Axel Heiberg Islands; the whole of Ellef Ringnes, Borden, Mackenzie King, and Brock Islands; and bits of Amund Ringnes and Prince Patrick Islands.

The vegetation she describes is sparse and the flora poor. There are fewer than 60 vascular species, most of them circumpolar in range. Most of the relevés whose contents she lists are far richer

in mosses and lichens than in vascular plants. But these few, small plants combine to form fascinating vegetation: "nanocomplexes" consisting of polygonal mosaics and networks of plants, on polygonally cracked soil. They are beautifully illustrated with unusually clear black-and-white photographs and well-drawn, uncluttered charts. Many elevation diagrams are given too, showing how roots and rhizoids are arranged in relation to each other and to soil cracks. Aleksandrova explains that the diameters of arctic desert polygons are only about half those of arctic tundra polygons. The vegetation pattern is therefore on a much smaller scale in desert than in tundra.

Canadian Arctic botanists who read the book will find it engrossing; they will want to compare the patterns described by Aleksandrova with those to be found in our Arctic, both in true polar desert and in the only slightly less austere conditions of far northern tundra. It should be noted, however, that this is a book for research workers, not for field naturalists in the ordinary sense. It is a scientific record of careful botanical exploration, carried out in some of the most arduous country on earth. The translation, by Doris Löve, is excellent; one is never conscious of the fact that it is a translation.

E. C. PIELOU

R.R.1, Denman Island, British Columbia V0R 1T0



Pielou, E. C. 1989. "Vegetation of the Soviet Polar Deserts, by V. D. Aleksandrova [Review]." *The Canadian field-naturalist* 103(4), 628–628.
<https://doi.org/10.5962/p.356270>.

View This Item Online: <https://www.biodiversitylibrary.org/item/106991>

DOI: <https://doi.org/10.5962/p.356270>

Permalink: <https://www.biodiversitylibrary.org/partpdf/356270>

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>.