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Altitudinal distribution patterns of alpine plants: Studies along a coast–inland transect in southern Scandes, northern Europe

By Jarle Inge Holten and Egil Ingvar Aune. Trondheim, Norway: Tapir Academic Press, 2011. 270 pp. NOK 420.00, US\$ 83.00. ISBN 978-82-519-2548-8.

The best way I can describe this book is to start with the first sentence from the description on its back cover: “This book describes the vertical distribution and ecology of 161 alpine vascular plant species along a coast–inland transect in central Norway.” The bulk of the book is composed of these species accounts; alphabetically organized distributional diagrams are accompanied by a brief account of the species, including its distributional limits (within the study transect), habitat, and zonation, as well as population trends and threats. Preceding the distribution diagrams, some excellent brief summaries describe the sampling methodology and the main factors that can regulate the distributions of alpine plant species, including bedrock, climate, and permafrost; some of these sections were prepared by additional contributors. This is followed by a description of

the key vegetation zones within the sampled transect.

Although this may sound a little dry, for a number of reasons this book is much more accessible and interesting than might be imagined. First, and apart from anything else, it is nice to know that there are still researchers out there gathering basic information on the occurrence and abundance of species. Also, in this particular case, the data gathering involved a fairly serious commitment, with the breadth of the sampling transect being 335 km, and samples being taken from sea level up to 2300 m across this range. The temporal as well as spatial sampling is also impressive: Jarle Inge Holten began work on this project in 1978. This work will clearly provide a very important resource for monitoring future environmental change impacts on Norwegian alpine plants.

Second, the quality of the publication, with color figures throughout, is very high. The description of the methodology is accompanied by some very clear and helpful maps and diagrams. Considerable effort must have been invested in getting these produced, and it has paid off. Because of the clarity of the supporting information, and the ease with which it can be linked to the species distribution diagrams, it would be a very good text for students starting to work on alpine plants. Apart from anything else, the book includes a

discussion of the question: “What is an alpine plant?” The text is also accompanied by some stunning photographs of landscapes and particular species, although I am suspicious as to whether Norway really is always this sunny.

Finally, I suppose there is a risk that a book such as this might come across as being a bit “worthy.” However, it is written with humor and real affection for the subject (which must clearly have existed, given the effort involved in collecting the data). Here are my favorite lines from the preface: “At the beginning, the field work was very laborious, due to the very steep, rugged and alpine topography in this part of the country. There were some episodes when the young investigator was in physical danger due to loose scree and boulders. Very soon, he understood that it was best to investigate this challenging landscape with assistants” (p 7). So, overall, this book is the result of a lot of effort, both in the field and during the development of the publication. It does what it says on the cover, and it does it very well.

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