

Plant Life of the Dolomites

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Plant Life of the Dolomites

By Erika Pignatti and Sandro Pignatti. Heidelberg, Germany: Springer, 2014. xxxvii + 769 pp. US\$ 209.00, £ 135.00, € 149.95. Also available as an e-book. ISBN 978-3-642-31042-3

A few years ago, I was lucky enough to visit the Dolomites as part of a study of facilitation by alpine cushion plants. I remember beautiful scenery, wonderful plant life, and a particularly tasty limoncello sorbet while watching Italy get knocked out of the 2010 World Cup (limoncello 1, Italian World Cup dreams 0). So I was delighted to get the chance to review this book and learn more about this wonderful alpine region.

This is a weighty new publication from Springer, and I approached it with some trepidation. However, I should not have worried. One thing the authors never miss is an opportunity to give some good advice. The introduction begins with a section titled "How to Approach This Book," and the authors state that "The topic of this book is the plant cover of the Dolomites, and its goal is to make the reader capable of understanding how it is composed, how it was formed, and what its future evolution may be" (p ix). It is clear from the outset that this book aims to be more than simply a phytosociological description of the vegetation of the Dolo-

The introduction contains an interesting history of vegetation recording and analysis, including a description of the authors' own work in the Dolomites and "Three Itineraries for Getting to Know the Flora of the Dolomites." There is also a description of the data provided in the later chapters, many of which focus on details of the vegetation associations. Chapter 1 then provides a general outline of the environment of the Dolomites. After this introductory overview come the detailed descriptions of the vegetation asso-

ciations, organized into broad habitat types ranging from the valley bottoms ("Stable Meadows and Vegetation of Fields and Human Settlements") to the high mountain tops ("Rupestrian Habitats"). These habitat groupings are themselves brigaded into sections, from "The Human Habitat" to "Alpine Vegetation on Dolomite and Limestone."

Each habitat chapter begins with a general introduction, including highly detailed descriptions with excellent illustrations, of the ecological and environmental conditions associated with that habitat. As well as providing clear descriptions of the processes regulating the development of vegetation in each habitat type, they discuss, where relevant, the cultural significance and human role in the development and management of these habitats. Then come the detailed descriptions of particular associations, including details of their geology, structure, floristic composition, and distribution. Each vegetation description, and indeed each chapter, is illustrated with excellent photographs and distribution maps, and overall the book is a beautiful object (which is nice to see from Springer, whose finished products are consistently expensive but can vary greatly in production qual-

The authors' enthusiasm for their subject—as well as the depth and breadth of their knowledge—is clear throughout. For example, the book contains many boxes that cover in detail a range of topics, from "What Is Phytosociology" in the introduction to "The Problem of the Baranci" in Chapter 5 on the alpine taiga. For those who don't know what the Baranci is—quite removed from the problems associated with it—there is a brief but helpful glossary at the end of the book.

However, and as set out in the introduction, this book is trying to go further than simply providing descriptions of the habitats and plant communities of the Dolomites. Roughly one third of the book is

given over to two sections focusing on the analysis of vegetation data: "Synthesis, Data Interpretation and Statistical Calculations" and "Conclusions." The synthesis chapters assess the roles played by different types of factors in structuring the vegetation, including physical, chemical, and biotic drivers. The conclusions chapters try to pull this information together to summarize the key processes regulating different aspects of biodiversity in the vegetation of the Dolomites and then attempt to assess how this detailed understanding might help to conserve these environments. I struggled most in these chapters. Overall, I felt at times as though the book would have benefited from the benevolent attention of an editor, because some of the language can be convoluted and slightly impenetrable. I do not write this lightly: I appreciate the immediate advantage given to those who can call English our first language. However, although the authors' language in many places is, in an absolute sense, accurate, occasionally it is not easy to follow, and I had to read some sentences several times to unpick the basic meaning.

In addition, I was sometimes floundered in the book's latter sections to understand what the conclusions were. For example, I was particularly interested in what Chapter 20, titled "A New Paradigm: The Approach to Complexity," had to offer. I like a good paradigm. Apparently, "As the conclusion to this work, an ambitious attempt is presented to interpret the plant life of the Dolomites as a complex system: a synthesizing outline of the vegetation defined by means of ecological information, a new concept of biodiversity, the structuring of the territory, all of which provide the cognitive elements for a new strategy for nature conservation" (p 693). This was no small ambition. The analytical approach "also makes it possible to confront the problems of the sustainable management of resources in a new way" (ibid). However, having read the chapter—which was interesting and made a good argument concerning multiple facets of biodiversity—I was left looking for a return to these initial goals. How did the analysis support this new approach to sustainable management? I could not see, or maybe it was assumed (incorrectly) that I was smart enough to see this without having it spelled out. Ultimately, I could work this out for myself, but I was left wondering whether my interpretation was the same as that intended by the authors

and would have liked some clear confirmation of this.

Yet these minor criticisms should not mislead. This book is a major achievement—not least because it will have two accompanying supplements, *Vegetation Tables* and *Atlas of Flora*. And apart from the highbrow research goals, it is simply a lovely book. It is clear that the data and research on which this book is based have been accrued over a lifetime of painstaking work by both authors and that they genuinely love their

subject. This enthusiasm, as well as the beautiful photographs, makes me want to get back to the Dolomites, sip a refreshing limoncello, and start to follow those itineraries.

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