
Preface

*Geobotanical maps do not represent the reality of the world but rather what
we know about it.*

(Janusz Bogdan Faliński)

Geobotanical research finds its syntheses in the production of cartographic documents (maps) which constitute a privileged medium of presentation of information and scientific data on plants in relation to environmental conditions. The significance of new geobotanical maps for already many years has been greatly augmented above all by the contribution that these may make to understanding and solution of environmental problems, such as protection of the flora, zonation of protected areas, management of plant resources and urban planning.

For such reasons, the Faculty of Natural Sciences and Technology of the University of Camerino instituted in 1998 the course *Geobotanical Cartography* for members of the *Scuola di Specializzazione in Gestione dell'Ambiente Naturale e delle Aree Protette* (School of Management of the Natural Environment and Protected Areas) and for students in the Natural and Biological Sciences as a general degree course.

In this book, born of the necessity to provide students a textbook for geobotanical cartography, we try to present the fundamental concepts in this field, which are otherwise sparse in truly scientific publications which often have limited circulation and are difficult to find. This has theoretical as well as practical value, and tries to give the students both an instructional aid for preparation for their exams and theses, and a reference text. Given the high degree of specialization in the material treated, this text is filled with many bibliographic references from various authors, not only to give the reader the greatest possibility for research from original sources but also as a cultural basis.

The book is concerned principally with geobotanical mapping but also contains a chapter dedicated to environmental mapping, because of the contribution that this has received from the former and because of its own current trends and contributions.

In drafting the text, I have tried to improve and expand on what I already wrote about geobotanical mapping in earlier contributions. The text is dedicated predominantly to botanical aspects of cartography and only in part to those

techniques (photogrammetry, use of satellite data, etc.) for which numerous, more specialized manuals already exist.

Beginning in 1962, in the Institute of Botany of the University of Camerino (from 1986 the Department of Botany and Ecology), I have had the possibility to collect data and produce geobotanical maps of various kinds, with a group of students and collaborators whom I would like to mention here: Ettore Orsomando, Edoardo Biondi (now at the University of Ancona), Roberto Venanzoni (now University of Perugia), Dan Gafta (now University of Cluj-Napoca, Romania), Krunica Hruska, Andrea Catorci, Paolo Minghetti, Aurelio Manzi, Renato Gerdol (now University of Ferrara), Fabio Taffetani (now University of Ancona), Claudio Chemini (now at the Centro di Ecologia Alpina in Viotte del Monte Bondone of Trento) and Rainer Buchwald (now Universität Vechta, Germany) for vegetation mapping; Carmela Cortini, Michele Aleffi, Sandro Ballelli and Fabio Conti for floristic mapping; and Roberto Canullo and Giandiego Campetella for mapping of populations. To these must be added researchers from other institutes, in particular Francesco Maria Raimondo (Palermo) and Filippo Piccoli (Ferrara). More recently, there has been a group of students of the School of Management of the Natural Environment and Protected Areas of Camerino that is dedicated, under my guidance, to various aspects of cartography: Luciana Carotenuto (Pavia), Anna Maria Castellaneta (Martina Franca), Wilcka Fanesi (Osimo), Renzo Feliziani (Acquasanta Terme), Simone Galassi (Macerata), Jessica Mazzarelli (Foce di Montemonaco), Stefania Menini (Livorno), Bruno Petriccione (Roma), Donatella Rosi (Visso), Sergio Ruggieri (Vieste), Roberta Tacchi (San Severino Marche) and Rosella Vallozzi (Ascoli Piceno).

Finally, I am particularly happy to acknowledge some botanists and ecologists with whom I have been able to study various aspects of geobotanical and environmental mapping, in the laboratory and in the field: the late Janusz Bogdan Faliński (Białowieża and Warsaw), Maximo Liberman Cruz (La Paz, Bolivia), Marcello Martinelli (São Paulo, Brazil), Paul Ozenda (Grenoble), Udo Bohn (Bad Godesberg) and Vasile Cristea (Cluj-Napoca). Janusz Bogdan Faliński, who is the author of the three-volume manual *Kartografia Geobotaniczna* (1990–1991), and I have together described the vegetation of the Gargano (promontory) of Adriatic Italy, of the Białowieża forest in Poland and of Pikhtovka in Siberia. To Dan Gafta (Cluj-Napoca), I am indebted for advice on the content of the book and for critical reading of the text.

I thank Marco Mogetta (Camerino) for producing the layout and Massimo Maccari (Camerino) for preparing printed illustrations and for correcting the proofs.

Particular thanks go to Augusto Persico and to the SELCA of Firenze (Florence), which has a grand tradition in cartographic publication, for supplying specific contributions.

The English edition of my book *Cartografia Geobotanica* was made possible thanks to Prof. Elgene O. Box of the University of Georgia, Athens, USA, who as a friend made himself available for the task of translating the book text from Italian into English.

The structure of the book and the division of the themes into 14 chapters was left the same as in the original, but many chapters were expanded with new information and bibliographic references. Some illustrations were also modified.

The discussions with Prof. Box during the translation work (which was done in Camerino during July 2011) were very useful for improving the original text. Together we have travelled to various parts of the world for geobotanic purposes, beginning with the international phytosociological excursion to Argentina in 1983 and followed by field excursions to Japan, USA, South Africa, Mexico and various countries of Europe, including Italy, France, Poland and Romania. Also, the symposia of the *International Association of Vegetation Science* and of the *Association Amicale Francophone de Phytosociologie* (organized at Rinteln by Rheinold Tüxen and at Bailleul by Jean-Marie Géhu and then in other cities) have provided opportunities to meet and discuss with many botanists interested in vegetation mapping, including Kazue Fujiwara (Yokohama), Frédéric Bioret (Brest), Guillaume Decocq (Amiens), Richard Pott (Hannover), Rüdiger Wittig (Frankfurt am Main), Xavier Loidi (Bilbao), Laco Mucina (Perth) and others (in addition to the many mentioned already in the introduction to the Italian version of the book).

I am very grateful to Prof. Box for his challenging translation work and thank him very deeply. I thank also Massimo Maccari (Camerino), who adapted the figures for the English edition and prepared the new figures.

Camerino
21 September 2011

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<http://www.springer.com/978-3-642-30234-3>

Plant and Vegetation Mapping

Pedrotti, F.

2013, XIII, 294 p., Hardcover

ISBN: 978-3-642-30234-3