

classical botany, medical biochemistry, organic chemistry and nuclear chemistry.”

The book starts with an introduction that includes appealing stories from Beresford-Kroeger’s childhood, a discussion of the world as a global garden, a definition of Beresford-Kroeger’s concept of “bioplanning” (covered in her previous book *Bioplanning a North Temperate Garden*), and a description of how bioplanning applies to forests. She then goes on to profile 20 North American tree groupings, including – genus followed by common name – *Acer* (Maple), *Asimina triloba* (Pawpaw), *Betula* (Birch), *Carya* (Hickory), *Catalpa* (Catalpa), *Crataegus* (Hawthorn), *Fraxinus* (Ash), *Gleditsia* (Honey Locust), *Juglans nigra* (Black Walnut), *Magnolia acuminata* (Cucumber Tree), *Ostrya virginiana* (Hop Hornbeam), *Pinus* (Pine), *Ptelea trifoliata* (Wafer Ash), *Quercus* (Oak), *Sambucus* (Elderberry), *Sassafras* (Sassafras), *Thuja occidentalis* (Cedar), *Tilia* (Basswood), *Tsuga* (Hemlock), *Ulmus* (Elm).

It’s puzzling, this choice of trees. Why these groupings and not others? Why include elderberries and leave out dogwoods, why hemlocks and not firs, why birches and not aspens? The author never tells us why; never explains her inclusion and exclusion criteria. And I can’t help but wonder, as I wander the fields and forests of home, about the cherries and beeches, tamaracks and spruces ... should they not be included in forest bioplanning too?

That little grievance aside, the book is vibrant and delightful, with much to teach from the wide range of perspectives mentioned earlier. Each profile includes six sections: “The Global Garden”, tracing the history and geography of each tree grouping; “Organic Care”, covering related horticultural topics; “Medicine”, discussing traditional and potential medicinal uses; “Ecofunction”, describing the trees’ ecological roles;

Cape Cod Wildflowers: A Vanishing Heritage

By Mario J. DiGregorio and Jeff Wallner. 2003. University Press of New England, One Court Street, Lebanon, New Hampshire 03766 USA. 169 pages. U.S. \$19.95.

This is a reprint of the original volume first published in 1989 by Mountain Press Publishing Company, with a new introduction by the authors. As the authors state, “This book is an appreciation, a guide, and a plea for protection. On one hand it explores the arcane lore of the medieval herbalists... On the other, it chronicles the latest scientific understanding of flowers’ ecological importance and current attempts to preserve natural diversity.”

If not unique, this book is at least one of very few examples of this particular approach to botanical description. It is arranged in chapters based upon habitat types, all common to the Cape Cod area. Each habitat is described in the opening of its chapter. The habitats include woodlands; ponds and bogs; sandplains; salt

“Bioplan”, explaining how the trees have been and could continue to be incorporated into human environments; and “Design”, about the trees’ appearances and aesthetic properties.

Much of the information was new to me. Like a maple biochemical, acerin, currently being investigated for antiviral and antibiotic qualities. Like the birch being one of the two sacred trees given to the Aboriginal peoples of North America. Like pines contributing numerous important air-freshening compounds to the atmosphere. Like hawthorn fruit being called a “pome” which, along with the leaves, produces a number of biochemicals which form a high-energy compound beneficial to migrating birds. Like basswoods producing huge crops of nectar at a time when bees need it desperately and many other flowering plants have stopped blooming.

The profiles are interspersed with photographs of other members of the forest community – lichens, fungi, flowering plants, shrubs – which help enhance the bioplanning concept and paint a larger picture of the forest ecosystem. And the occasional yellow boxes with relevant stories from the author’s life add a pleasing personal touch.

One of the most personal touches in the book appears at the end of the introduction, where Beresford-Kroeger shares with us her dream “that a moratorium will be put on the cutting of what is left of the global forests and that ordinary people with an acorn and a shovel begin the long road back to nature.” Ordinary people. That’s me. Though I don’t know if I have any acorns around. But there’s a collection of shovels in the garden shed, and space along the fence. Perhaps I could manage to find a handful of maple keys ...

R. SANDER-REGIER

RR5 Shawville, Quebec J0X 2Y0 Canada

marshes; and dunes and beaches, with an additional chapter to accommodate alien species.

Each habitat type is represented by ten to fifteen species endemic to each area. As the authors admit, the sampling is limited in scope, covering only 66 of the 1300 species of vascular plants found in the Cape Cod area. Each species is covered on facing pages, with the left-hand page containing a description of the plant and other comments on such aspects as propagation and threats to its environment. A colour photograph of the flower is located on the right hand page.

The authors could have, however, spent a little more time in researching their data, especially since this is the second edition of their work. The pollination process of *Cypripedium acaule*, for instance, suffers from the following extremely fanciful and highly inaccurate description. “Drawn by the promise of a sugar “high” from the nectar inside, insects enter through the slit... On the way out the insect is plastered with a natural

glue on which, in turn, pollen is dusted. Emerging from the flower with cargo (of pollen) and payment (in nectar) the insect goes to another flower where, in the same intricate exit process, some of the pollen is deposited on the stigma to fertilize the plant and produce new seed." Of course, *Cyp. acaule* has no nectary, therefore there is no payment in nectar; pollen is not dusted; and the picture of an insect "plastered with natural glue" is entirely misleading. Because the above passage occurs in chapter one, a suspicion tends to be

planted early as to the accuracy of the rest of the text.

The authors are to be commended in producing a book dedicated to the ever growing threats to our natural environment. Although the scope of this volume is limited to the Cape Cod area of Massachusetts, its message could equally apply to almost anywhere in North America.

WILLIAM R. ARTHURS

1228 Lampman Crescent, Ottawa, Ontario K2C 1P8 Canada

Lewis Clark's Field Guide to Wild Flowers of the Sea Coast in the Pacific Northwest

Compiled and photographed by Lewis J. Clarke, edited and composed by John G. Trelawny. 2004. Harbour Publishing P.O. Box 219, Madeira Park, British Columbia V0N 2H0 Canada. 80 pages. Second Edition. Canadian \$12.95.

The first edition of this beautiful little book was published by Gray's Publishing Limited, Sidney, British Columbia, in 1974 and numbered 64 pages. In this second edition which numbers 80 pages, John Trelawny has made some changes in the introduction and included some acknowledgements. Like the first edition, the pages are not numbered, but each species and the accompanying descriptive text is numbered sequentially so that they can readily be found from the index which includes both scientific and common names.

The 95 flower pictures in this second edition are absolutely beautiful and in many are somewhat clearer than those in the first edition because of more modern

technology in producing them from the photo slides and like the 1974 edition each photo has a scale marker which gives the size of the picture in relation to the average plant size. A glossary at the end of the volume depicts various leaf shapes and flower parts to aid the user in understanding the descriptive text which accompanies each photograph. New plant photographs have been provided by T. & S. Armstrong, M. Barker, Ugo Cagnetta, W. Merilees, F. Pratt, H. Roemer, W. van Dieren, and M. Wheatley.

WILLIAM J. CODY

Biodiversity, National Program on Environmental Health, Agriculture and Agri-Food Canada, Research Branch, Wm. Saunders Building, Central Experimental Farm, Ottawa, Ontario K1A 0C6 Canada.

Wild Flowers of Field & Slope in the Pacific Northwest

By Lewis J. Clark. 2002. Harbour Publishing, P.O. Box 219, Madeira Park, British Columbia V0N 2H0 Canada. 108 pages. Canadian \$9.95. Paper

Wild Flowers of Forest & Woodland in the Pacific Northwest

By Lewis J. Clark. 2003. Harbour Publishing, P.O. Box 219, Madeira Park, British Columbia V0N 2H0 Canada. 100 pages. Canadian \$12.95.

Wild Flowers of the Mountains in the Pacific Northwest

By Lewis J. Clark. 2003. Harbour Publishing, P.O. Box 219, Madeira Park, British Columbia V0N 2H0 Canada. 106 pages. Canadian \$12.95.

These three books contain absolutely beautiful colour photographs. The photographs are numbered sequentially and each one has a marker [$\times 0.5$] to indicate its size and is accompanied by a printed paragraph with the common and scientific names, a detailed description, together with the habitat and range, and a number to indicate its sequence in the book. There are 108 in the first book, 100 in the second and 106 in the third. There is a four or five page interesting introduction at

the front of each book and an index, glossary and a list of Additional Field Guides available from Harbour Publishing at the end. There are most interesting pictures on the front covers of each book. On the back covers there is a note about the author, Dr. Lewis J. Clark together with a map of the Pacific Northwest on which there are shaded areas depicting where the wild flowers can be found. All are elegant.

WILLIAM J. CODY

Biodiversity, National Program on Environmental Health, Agriculture and Agri-Food Canada, Wm. Saunders Building, Central Experimental Farm, Ottawa, Ontario K1A 0C6 Canada