## BOOK REVIEW

## by Donald Schnell, CPN Co-Editor

CRUM, HOWARD. 1988. A FOCUS ON PEATLANDS AND PEAT MOSSES. University of Michigan Press, Ann Arbor. 306 p.

The true CP enthusiast usually expands from a narrow interest of acquiring plants and growing them using standard methods to study of the environment in which they are found. This reviewer has spent many hours in various peatlands in which there was not one CP in sight, but I still had a great and productive time just enjoying and studying the peatland.

I can recommend this book without hesitation to all those who are interested in learning more about peatlands, particularly those in the broad Great Lakes area and upper midwest generally. The author's primary interest is bryology, (study of mosses and liverworts) but this has taken him to many peatlands and his accumulated experience, research and knowledge of these areas comes through clearly in this book along with a great affection for the areas, even when hip deep in a false lake bottom!

The first 200 pages or so of the book covers peatlands in general, and the author dives headlong into the mire of confusion regarding naming and classification. He discusses bogs, fens (rich and poor), marshes and swamps and carefully defines his concepts of them and points where he differs from others, or even from concepts that apply more closely to other parts of the country (eg Maine) or even of the world (British Isles, Sweden, Germany, etc.). His focus tends to return to the Great Lakes area. The terms ombrotrophic, eutrophic and dystrophic are put into perspective, and other wetlands such as lakes, seeps and mires are correlated, and terms such as strings and flarks are carefully described.

Throughout the book are great numbers of very well printed black and white photos, charts, tables and especially useful and superb line drawings. I cannot say enough about the line drawings which meet the botanical art criteria of sharply illustrating important diagnostic points in an artistically pleasing and balanced presentation. Higher plants were drawn by Marie Wohadlo, and sphagnum drawings by Constance Butley.

The entire book is interesting and informative but I was especially impressed by the chapters on plant/peatland relationships (which presented a photo/drawing flora by Wohadlo), the chapter on nutrient cycling which is written quite understandably and is far more complete than similar discussions in general biology and botany texts and most ecology works I have read, the chapter on bog exploitation for medical, heating, horticultural and other commercial reasons, and finally the pages in the book beyond p. 200 which present what is to me the first clear lead into understanding taxonomy of Sphagnum spp. Dr. Crum eases one's apprehension and says it can be done, tells how to do it, then presents keys, good descriptions of each species, and Butley's drawings of each species, one to a page with the whole plant, branches, leaves, pore and retort cells, pertinent histologic structures, spores, etc. Many people may not realize that various Sphagna are highly adapted to niches and microhabitats of each kind of peatland.

The actual mention of CP is confined to Great Lakes species (except for *Dionaea*) with about a page and a half of text, and the superb photos and line drawings. But this should not deter the beginning or amateur CP enthusiast from adding this book to their library as a ready source of pertinent peatland information.

The book concludes with an excellent glossary, an index, and a bibliography of 286 references, many as recent as 1987.

The flyleaf suggests this is the first entry into a projected series called GREAT LAKES ENVIRONMENT edited by Warren H. Wagner, Jr. We look forward to ensuing books.

The book is available in hard and soft cover. Write the University of Michigan Press, Ann Arbor, MI 48106 for price, postage and sales tax information.