

The Guinness Book of Animal Facts and Feats

By Gerald L. Wood. 1983. Third edition. Guinness Superlatives (Sterling, New York). 252 pp., illus. £8.95 (U.S. \$19.95).

Records books doubtlessly imply something about fundamental human competitiveness. Here is the book for the zoological side of that trait. The chapters proceed down the *Scala naturae* from mammals through lower vertebrates to invertebrate groups and prehistoric animals. The records given (both world and British) list not only standard categories such as largest, longest, and oldest, but also most intelligent, ferocious, and dangerous (!). Both metric and imperial units are given, highly appropriate for our semi-metricated world. The book is well referenced, indexed, and illustrated, including colour pages, and end paper charts providing velocity and longevity records.

The book stands in the long tradition of compilations of zoological facts dating back to the Roman Pliny. It is more a reference source than a volume to be read throughout, and contains no theory or interpretation on such underlying zoological issues as allometry or patterns of life histories. As title holder of smallest fish, future editions should report a goby from the Chagos Archipelago described by Richard Winterbottom and Alan Emery of the Royal Ontario Museum in 1981. For lecturers wishing to spice their presentations, parents besieged by inquisitive offspring, and aficionados of Trivial Pursuit, the book will be valuable to have on hand.

PATRICK COLGAN

Biology Department, Queen's University, Kingston, Ontario K7L 3N6

BOTANY

Where Have All the Wildflowers Gone?

By Robert H. Mohlenbrock. 1983. MacMillan Publishing, New York (Canadian distributor, Collier MacMillan, Toronto). xiv + 239 pp., illus. + plates. \$22.95

This book has been written to bring the plight of rare and endangered American plants into the public forum. Because of Mohlenbrock's extensive experience in floristic and systematic research, he has been able to convey accurate information in the accounts of the 120 species covered in this book. At the same time, he has produced enjoyable and interesting accounts of these species. It is not necessary to have an extensive knowledge of botany to enjoy and understand the message being sent in this book.

The book has been divided into nine chapters and four appendices. Mohlenbrock has divided the U.S.A. into seven regions (northeast, southeast, north-central, south-central, Rocky Mountains, far west, and Hawaii-Alaska), and within each of these, he provides accounts of the endangered and threatened plants for which federal protective legislation is available. In total, 64 taxa have received official recognition in this manner. He also treats an additional 56 species which are either presently under review for inclusion on the federal list, or which he feels should be considered for inclusion. Each species account contains several interesting aspects. Wherever possible, the history of the taxon is outlined, including the general location and time of the original discovery of the plant, as well as the subsequent fate of those

colonies. In many cases, Mohlenbrock has attempted to visit these sites, and anecdotal accounts of these visits convey his feeling of excitement at seeing these rare plants, and also his appreciation of the natural settings in which they occur. In certain instances, where the discovery of a rare plant has caused a controversy with regard to development proposals, etc., a brief history of the results of these controversies has also been given (see, for example, the discussion of Furbish's Lousewort, *Pedicularis furbishiae*, pp. 10-14). The graphic descriptions of the demise of numerous cacti through overcollecting for the greenhouse trade is also extremely instructive. In all cases, the rationale for inclusion on the federal list is given. I feel that this is an extremely important contribution for this book to make, since the general public often wonders how and why species are designated.

The chapters preceding and following the regional treatments give a good perspective to the entire book. The first chapter deals with *Thysanotus americana*, a native prairie plant that was discovered near Chicago in 1912, and has not been seen since 1914. This appears to be a case of extinction due to causes not induced by man. This chapter then also briefly summarizes the history of protective legislation for endangered organisms in the U.S.A. The closing chapter discusses other presumed cases of extinction, and issues a plea for involvement in local botanical organizations, and for protection of our native flora and the environment in general.

This book provides an extremely useful overview of the history and status of all of the U.S.A.'s officially recognized endangered and threatened plants. All of the species are dealt with in an interesting and informative way, and each is illustrated with a line drawing or a photograph. Most of these are of good quality, although the drawings tend to be small, and therefore lack floral detail. A few minor complaints about accuracy and detail come to mind, but these do not really detract from the value of this book. In most cases, Canadian distribution is briefly outlined, but in the case of *Isotria medeoloides* (Small Whorled Pogonia), no mention of the Ontario station is given. In the third appendix (plants presumed to be extinct in the U.S.A.), *Carex livida* is listed as not having been seen since 1922. However, a recent paper on the Carices of Minnesota (*Rhodora* 86: 151–231) shows it to occur in no less than 9 counties in that state, and it is also known from New England.

I have found this to be an enlightening and informative book that brings endangered and threatened plants into focus. The mandate for protection in Canada lies with the provinces, and I hope that the public servants entrusted with this responsibility here will take a lesson from the advances already made in the U.S.A. This is not to say that the Americans have completed their process of designation of species. It is an ongoing process, but the provinces of Canada have a long way to go to meet their obligations in this matter. With the publication of Mohlenbrock's book, the whole issue of protective legislation for endangered species is brought more fully into the public domain, both in the United States and in Canada.

WILLIAM J. CRINS

Department of Biology, Erindale Campus, University of Toronto, Mississauga, Ontario L5L 1C6

North American Terrestrial Orchids: Symposium II Proceedings and Lectures

Edited by E. H. Plaxton. 1983. Michigan Orchid Society, c/o Raymond McCullough, 14800 Harrison Avenue, Livonia. 143 pp., illus. U.S. \$17.50.

Mention of the American Orchid Society (AOS) conjures up visions of colourful epiphytes growing in a tropical forest or in a greenhouse, scenes which a naturalist would not see in the field in Canada. While the image is justified, a look at the Bulletin or at the research funds of the AOS shows that they do not ignore the temperate terrestrial orchids. The present book is the proceedings of a symposium on North American Terrestrial Orchids at an AOS meeting in Detroit in October 1981 organized by the Michigan Orchid Society. The sessions lasted a day and a half and were well attended.

The ten papers review the North American terrestrials (NATS) with emphasis on culture, development, taxonomy, distribution, and conservation. They may be grouped into four categories for review purposes.

The first category deals with culture and development. C. T. Riley gives a brief summary of his methods of growing NATS from seed, in the hope that commercial growth will someday be possible. He also gives the formulation of his growth medium for seedlings. W. P. Stoutamire reports various observations on seedling development. Unfortunately, an interesting table of sizes of orchid seeds in the paper cannot be put to any quantitative use in the absence of the standard deviations of the averages. In the third paper in this group, C. E. Whitlow gives a general outline of his methods of cultivation of Cypripediums, and gives

capsule comments on his experience with 19 species, both North American and Asiatic.

The second category has only one paper, that of R. T. Holman, in which he describes the application of a modern method of chemical analysis, gas chromatography, to the identification of the components of flower fragrances. He illustrates the use of this technique for studying the composition of odours from various parts of the Cypripediums as well as from *Platanthera obtusata* and then discusses the possible taxonomic value of such measurements in the Mexican Govenias. Holman uses an unusual quantity to measure the relation between species. This relation involves the concept of the minor ratio, i.e. the smaller quantity divided by the larger. But this is not mentioned in the present paper. His equation, however, is written in terms of normal ratios. His discussion is then confusing until the reader refers to a previous paper.

The third category deals with NATS in the Great Lakes region, mostly on the U.S. side. P. W. Thompson gives a brief outline of organizations protecting natural areas in Michigan and their holdings, which total 391 000 acres (158 000 ha). R. J. Griesbach and J. H. Asher Jr. present a wide-ranging review of NATS and their habitats in the Boundary Waters Canoe Area of Minnesota adjacent to Quetico Park. Much of the article is a literature review, for they comment that they have not seen and studied many of the NATS in the Boundary Waters Canoe Area. F. W. Case Jr. first updates his valuable, but out-of-print,



Crins, William J. 1985. "Where Have All the Wildflowers Gone?, by Robert H. Mohlenbrock [Review]." *The Canadian field-naturalist* 99(2), 283–284.
<https://doi.org/10.5962/p.355429>.

View This Item Online: <https://www.biodiversitylibrary.org/item/89190>

DOI: <https://doi.org/10.5962/p.355429>

Permalink: <https://www.biodiversitylibrary.org/partpdf/355429>

Holding Institution

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Sponsored by

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Ottawa Field-Naturalists' Club

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.