

It must be confessed that, even with the outstanding and impressive job performed by the authors, the organization of the total body of ecological principles leaves something to be desired. As in reading the dictionary, one tends to lose the thread of the story in the mass of detail. Perhaps the method of composition, by a board of five outstanding and able authors, each with a lifetime of facts, experiences, and observations to place at the disposal of the group, makes inevitable some roughness in spite of the obvious and laborious effort to assure coherence and literary excellence. In this connection the method of work followed is of interest. First the different authors prepared the separate chapters. Eventually all parts of the manuscript were read aloud to the other authors and there was much discussion of questioned points. The result is an extraordinary accumulation of detailed facts, generalizations, and documentations. If the text lacks somewhat in smoothness or in literary felicity, it is quite understandable. Perhaps if one of the distinguished authors would now take the book and rewrite it from a synoptic view, shortening it somewhat, we could count on more rapid appreciation of it by the scientific and general public. But this reviewer does not want to leave the impression that anyone should undervalue the book. Its publication marks a great advance.

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***Webs in the Wind: The Habits of Web-weaving Spiders.***  
Winifred Duncan. New York: Ronald Press, 1949.  
387 pp. \$4.50.

***American Spiders: A Guide to the Life and Habits of the Spider World.*** Willis J. Gertsch. New York: D. Van Nostrand, 1949. 285 pp. \$6.95.

Here are two books on spiders, so completely different that there is no question of comparison. Miss Duncan is primarily interested in the work of spiders and not in the spiders themselves. Dr. Gertsch is interested in the spiders themselves and looks upon a knowledge of their works and ways as necessary for their complete understanding.

Miss Duncan admits, in the foreword of *Webs in the Wind*, that she knew nothing about spiders when she started to observe them and their daily life. She chose spiders because "they are the only creatures which are full of activity and variety, and yet sedentary. Also ubiquitous." For two years, part of which was spent in New England and California and part in Mexico, she has watched and sometimes sketched those spiders and webs which have come to her notice. The inevitable result of such a program is a little here and a little there but no picture even approximately complete. This is not intended as criticism, for Miss Duncan makes no pretense that she has written an exhaustive treatise for arachnologists; it is rather a story that has been fun to write and will be fun for others to read. As such, her book is a success though some readers will regret that the identities of many of her pets are unknown.

Dr. Gertsch, who has charge of the spider collection of the American Museum of Natural History, chose to write about spiders because he knows about spiders. He is most interested in their classification and so his book is somewhat weighted in that direction. And since a proper classification of any group of animals must take into account not only the physical forms of the members of the group but also the habits and modes of life of the different species, he has included chapters dealing with the life of the spider, spinning, dispersal, courtship and mating, evolution and economic and medical importance. Other chapters deal with the major groups of the spiders themselves. The average reader will probably find the chapters on courtship and mating and economic and medical importance the most interesting. The fantastic nuptial dances of the male jumping spiders seem reasonable when one realizes that until the male has fully identified himself to the female, he is in constant danger of being killed and eaten by his mate. As to the medical importance of spiders in this country, Gertsch comes to the conclusion that only the black widows (*Latrodectus* spp.) are dangerous, and even these not as dangerous as the public in general considers them.

The 64 plates, half of them in full color, add very greatly to the pleasure of the reader. The author is indeed to be congratulated on getting together such a wealth of excellent pictures. The reviewer thinks that it would have been better if the plates had been numbered consecutively instead of in two series, but that is really a minor point. More important, it would seem that more should have been written about the enemies of spiders.

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***Irrigated Soils: Their Fertility and Management.*** D. W. Thorne and H. B. Peterson. Philadelphia: Blakiston, 1949. 288 pp. \$5.00.

The objective of these two Utah State Agricultural College authors was to write a textbook which would provide a source of information on those soils upon which more than one-half of the world's population is dependent, the irrigated soils. They assume that the reader has an elementary knowledge of botany, chemistry, mathematics, and physics and is familiar with concepts of pH, basic exchange, and physical properties of soil.

Some of the topics treated in the 25 chapters are: his-