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Review of *Predator upon a Flower: Life History and Fitness in a Crab Spider*. By Douglass H. Morse

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This masterfully written, 377-page book is a product of the author’s 25 years of detailed natural history studies of a commonly encountered crab spider (*Misumena vatia*) which frequents prairies and old fields in the United States, Canada, Alaska, Mexico, Europe, Asia, and North Africa. It is a delight to read because of the author’s flowing narrative style and his adeptness in placing his fascinating natural history observations of this consummate sit-and-wait predator within the broader contexts of foraging theory, reproductive biology, learning behavior, resource allocation, and, ultimately, lifetime fitness.

After presenting the book’s overall plan and its central theme—lifetime fitness—in his introduction, Morse briefly recounts the historical progress of his research, reflecting upon how each discovery led to changes in subsequent studies, and how this seemingly undirected research produced so many novel discoveries. Some basic biology of the crab spider follows, along with an exploration of prey choice, patch choice, behavior, and foraging strategies of both adult and juvenile spiders. How these foraging decisions influence basic life history traits, such as fecundity and survival, is also probed. Next, the roles of various physical and biological constraints, such as dessication, predation, parasitism, and competition, are discussed. Innate and learned behavior influence foraging repertoires as well. Morse reviews the life history consequences and potential sexual conflicts arising from the fact that males of this species are much smaller than females. Lastly, he discusses the crab spider in relation to the dynamics of the broader community, i.e., its interaction within and among trophic levels.

I highly recommend this thoughtful work to any individual interested in the natural history, life history parameters, foraging behavior, and fitness of any organism. In addition to containing a wealth of information on the biology of a wide-ranging prairie spider commonly found in the flowerheads of milkweed, goldenrod, and prairie rose, this reasonably priced work may be regarded as a manual of research design and methods useful in undertaking nature studies anywhere. It will make a valuable addition to your library. **Hank Guarisco**, Adjunct Curator of Arachnids, Sternberg Museum of Natural History, Fort Hays State University.