the preface, these are moving and intuitively appealing sentiments, but they dilute the developing and much needed rigor of conservation biology.

Ogden Nash mused that "God in his wisdom made the fly and then forgot to tell us why." But as conservation biologists our task is to find out why there are flies and how they live and then to explain to others why they and monarch butterflies and all the other insects are important and worth conserving before we swat them all or clear away the few remaining habitats available for some of them.

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Vignettes: Indoor Zoology

Movie theaters used to be a fine place to get mice. They were open to the public. Every theater had a popcorn stand. Spilled popcorn kept the mice concentrated and breeding. We used the pounce system for catching them, but sometimes we took off our boots and laid them along the wall. Each mouse that chose to hide in a boot was very easy to catch—in fact it was essentially caught.

—*Frances Hamerstrom*, in *My Double Life: Memoirs of a Naturalist* (University of Wisconsin Press)

The distinctions made by legal minds are often puzzling from an entomological point of view. . . . Doutt (1959) lamented, "Entomologists, although they may be saddened, will not be surprised to learn that in many insect cases that reach the courts the judge cannot resist ponderous attempts at judicious humor." One such case was *Ben Hur Holding Corp. v. Rox* (1933), in which a small number of crickets was deemed insufficient cause for withholding rent. The judge reasoned "while a cricket is technically an insect and a bug, it would appear from the study of his life, that instead of being obnoxious, he is an intellectual little fellow, with certain attainments of refinement and an indefatigable musician par excellence." Contrary to legal opinion, crickets and cockroaches are not appreciably different except for the fact that cockroaches at least have the decency to remain silent at night.

—*May Berenbaum*, in *Bugs in the System: Insects and Their Impact on Human Affairs* (Addison-Wesley)

Other Books of Interest

Arabidopsis. ELLIOT M. MEYEROWITZ and CHRIS R. SOMERVILLE, Eds. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1994. xii, 1300 pp., illus. $175. Cold Spring Harbor Monograph 27.

This volume is an attempt to synthesize what is known about the biology of the small mustard that has become a central model system for plant molecular genetics in the past decade. In current practice "*Arabidopsis*" generally refers to the species *A. thaliana*, and in fact, according to R. A. Price *et al.* in the opening chapter of the work, the genus as such is not well defined; it is native to Asia and bears a relationship to such economically important plants as cabbage and broccoli (Brassicaceae or Cruciferae) as well as to some familiar ornamental plants. The properties of *A. thaliana* that underlie its usefulness in biology are related to its "unconventional" nuclear genome, which is unusually small and has relatively little dispersed repetitive DNA, being thereby especially amenable to cloning but otherwise not atypical of flowering plants. Its genetics is the subject of the next eight chapters in the volume, which cover chloroplast and mitochondrial DNAs, molecular cytogenetics, quantitative genetics, mutagenesis, and tissue culture and transformation; also included in this section is a "historical view" by C. Koncz and G. P. Rédei, who trace studies of genetics with *Arabidopsis* back to 1945 and provide some comparisons with other model organisms from Mendel's peas to more recent predecessors such as *Drosophila*, *Neurospora*, and *Escherichia coli*. The treatment of genetics is followed by nine papers on development, from seed through root and flower to fertilization, and seven on growth, including discussion of ethylene, giberellin and abscisic acid, auxin and cytokinin, light signal transduction, circadian rhythms, tropisms, and effects of physical stimuli on root growth. Five papers are then devoted to biotic (viral, microbial, and nematode) and abiotic (light, water, heat shock, and cold) stress. The last and longest group of papers is devoted to biochemistry and cell biology, with 11 contributions covering such topics as photosynthesis, secondary metabolism, the cell wall and cytoskeleton, and the biosynthesis and assimilation of starch, nitrate, phosphate, and iron. The volume ends with two appendixes, one a brief account of electronic *Arabidopsis* information sources and the other an updating of Meyerowitz and Pruitt's 1984 Green Book listing genetic variants of *A. thaliana*, and a 32-page subject (but not author) index.

Katherine Livingston

The Cognitive Neurosciences. MICHAEL S. GAZZANIGA, Ed. MIT Press, Cambridge, MA, 1994. xiv, 1447 pp., illus., + plates. $95 or £64.95. A Bradford Book.

In the 1960s there flourished a broadly based effort known as the Neurosciences Research Program intended to facilitate the coalescence of the neurosciences as a discipline. A number of workshops held under its aegis culminated in a month-long conference in Boulder, Colorado, in 1966 and the publication in 1967 of a large collective work entitled *The Neurosciences: A Study Program* (see *Science* **162**, 1114 [1968]). Now in *The Cognitive Neurosciences* we have a still larger work following in that tradition but directed more explicitly to addressing the "explanatory gap . . . between biologic process and the processes of mind." Developed out of a summer institute held at Lake Tahoe, the work consists of 92 papers grouped in 11 sections, each with a separate editor or pair of editors who provide an introduction for it. The two opening sections, edited by Ira B. Black and by Pasko Rakic, are devoted to molecular and cellular plasticity and to neural and psychological development. Sensory systems, which provide "the gateway to cognition," are the subject of the third section, edited by Colin Blakemore and J. Anthony Movshon; with 17 papers, 10 of which are devoted explicitly to vision, this is the largest section of the book. Motor systems and their proprioception are addressed under the broader heading Strategies and Planning, with Emilio Bizzi as editor. Attention ("orienting to sensory stimuli") and memory are treated next, the respective editors for these topics being Michael Posner and Endel Tulving. A group of papers on language edited by Steven Pinker considers language acquisi-