SCIENCE'S COMPASS

suggestions are pertinent to a much broader audience. A rational risk-assessment policy would go far in leading society into the molecular age through applications and further developments of the research trends discussed in *The New Chemistry*. Likewise, although the authors present research from a chemical perspective, individual topics and particular implications should interest scientists from a wide range of fields.

BOOKS: FORENSIC SCIENCE

Crime-solving Bugs

Jason H. Byrd

the opening paragraph of the first chapter of *Maggots, Murder and Men* offers a succinct summary of the basic carrion ecology that drives the science

Maggots, Murder and Men Memories and Reflections of a Forensic Entomologist by Zakaria Erzinçlioğlu Harley, Colchester, UK. Paper, 256 pp. £13.95. ISBN 0-946589-65-8. of forensic entomology: As time passes and decomposition progresses, different insect species are attracted to the highly nutritious resource of a dead human body. Each leaves a "mark for future interpretation by those who look into such things." The succes-

sion of insects occurring on a body provides a measure of time since death. The paragraph's simple and straightforward explanation of a relatively obscure science typifies this book.

Zakaria Erzinçlioğlu, the former director of the Forensic Science Research Centre at Durham University, is one of Britain's preeminent forensic entomologists and a world expert on blow fly biology. "Dr. Zak" has previously written for both professional and lay audiences and has appeared in several television programs on forensic topics. This book demonstrates his ability to intrigue the seasoned expert as well as captivate the casual reader. That ability makes the work stand apart from other recent titles that have attempted adventurous explorations of careers in forensic entomology. It should be a welcome addition to the library of anyone interested in this rapidly growing field.

The author artfully weaves his discussions of the basic principles and applica-

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tions into colorful stories and case histories. He incorporates thorough outlines of such germane topics as insect growth and development, insect succession, DNA methods, and the significance of varying colonization patterns. Readers lacking an advanced understanding of this material will receive an excellent education along with the fascinating tales.

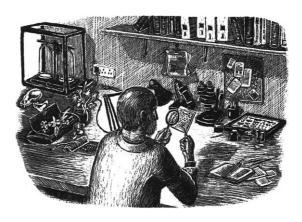
Erzinçlioğlu uses a carefully selected sample of historical and modern cases to il-

lustrate principles and to highlight the field's usefulness in criminal investigations. For each, he concisely summarizes the relevant concepts and the case's importance. Most of the recent examples are drawn from the author's own experiences. It seems clear that he has chosen these cases for the perspectives they offer on forensic science, not simply because of his involvement. Thus, he avoids a common shortcoming of similar works.

Although many of the individual cases and the history and

development of the field have been covered elsewhere, it is refreshing to find so much information summarized within one book. And when he addresses commonly reported topics, such as the earliest known use of entomology in criminal justice, Erzinçlioğlu does not belabor the issues. Most of his accounts of historical cases introduce little known facts or personal inferences that keep the topic fresh and even spark the interest of readers familiar with it.

Maggots, Murder and Men is more than a repository of case histories from forensic entomology. It also offers an intriguing account of the author's experiences working within other realms of forensic science. In addition to providing details of other, nonentomological, investigations of crime, the author incorporates forays into purely entomological, nonforensic, science. And in the final chapter, Erzinçlioğlu turns to address the status of



forensic science in the environment of adversarial criminal trials. (He argues for state-funded, independent forensic science.) These digressions, about which he seems almost apologetic, serve to maintain interest and round out the coverage. But the reader is never far removed from discussions of the insects that lie at the heart of the author's interests and serve as the common thread in his engaging and informative book.

BROWSINGS

Machu Picchu. A Civil Engineering Marvel. *Kenneth R. Wright and Alfredo Valencia Zegarra*. American Society of Civil Engineers Press, Reston, VA, 2001. Paper, 144 pp. \$49. ISBN 0-7844-0444-5.

The remains of the "Lost City" of Machu Picchu (occupied 1450 to 1575) straddle a rugged ridge on the eastern slopes of the Peruvian Andes, a breathtaking setting that presented considerable challenges to the Inca who built this royal retreat. The authors



discuss the planning and construction methods the Inca used to solve such problems as site constraints, water supply, drainage, and food production. Their account includes an extensive selection of instructive photographs and sketches, a detailed map, and an engineeringoriented guide to a walking tour of these renowned ruins.