BOOK REVIEW

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A Review of A Manual of Forensic Entomology

REFERENCE: Smith, K. G. V., A Manual of Forensic Entomology, Cornell University Press, 124 Roberts Place, P.O. Box 250, Ithaca, NY, 14851, 1986, 205 pp., \$39.95.

Since the late 1800s the application of forensic entomology to the determination of "time since death" has been sporadically used in Europe, and to a greater degree in the United States, with ever increasing success. Most of the previously published texts on forensic medicine and death investigation have provided little if any practical information on the use and practice of forensic entomology, as much of the research and case studies concerning this subject have been primarily published in entomological journals. The publication of this book can be considered as a significant contribution to the forensic science community, as it is the first text in English to deal exclusively with the application of entomology to the forensic sciences.

The two most useful aspects of this book are that it provides extensive references to published research and case studies, and it serves as a good introductory text on the identification, collection, and laboratory examination of insects commonly associated with a human corpse. Individuals expected to benefit from this book are forensic scientists and investigators who have an elementary knowledge of entomology. A basic level of entomological discussion is maintained throughout the text, as technical terms have been kept to a minimum, and vernacular names have been supplemented for scientific names whenever available. A short glossary is provided at the end of the book for those technical terms which are encountered in the book.

The book is 205 pages in length, and can be basically divided into 4 sections which cover various aspects of forensic entomology. The first section of the book provides an introduction to the history of forensic entomology and the insect succession on cadavers, including the influence of various environmental factors on carrion insect succession. Following this section, methods and techniques for the collection, preservation, and examination of carrion insects are discussed, in addition to experimental studies on carrion, and the interpretation of entomological data for forensic science purposes, primarily the determination of time since death. The information "establishing time since death" covered in this section is somewhat brief, as it is only 4 pages in length. However, it does provide data on the growth and development of 14 commonly encountered species of flies, and sufficient information on the bases by which "time since death" is established. The third section of the book deals with the application of entomological data, as presented in a brief review of 19 case studies dating from the late 1800s to 1983. From the case studies, one can certainly appreciate the case

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work, yet it would have been much more beneficial if the author had provided an in depth review of more recent case studies.

The final section, which is 105 pages in length, and comprises most of the book, serves as a taxonomic reference guide which will greatly facilitate the identification of carrion insects which are commonly associated with a human corpse. There are an impressive number of black-and-white drawings, some 366, in which the external morphology of both adult and immature forms of various genera and species of carrion frequenting insects are diagramed. For the majority of the genera and species mentioned, information on their biology and geographical distribution is also given. In addition to the carrion insects, brief descriptions are given of various ectoparasites such as fleas and lice, which could be of importance in a drowned corpse, and insects which are associated with *Cannabis*.

The author is to be commended for compiling a large number of the pertinent entomological sources into a single book, as this will be of tremendous value to the many individuals in the forensic sciences, who for the most part are either unaware or unfamiliar with the existing literature. This book is highly recommended for use by medical examiners, coroners, and other forensic scientists or death investigators who might be involved in the collection and initial examination of entomological evidence.