



## Pathology & Biology Section – 2004

### G66 Trends in Forensic Entomology in the United States and Abroad

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The goal of this presentation is to provide those attending with an update on research trends in forensic entomology.

Due to the amount of forensic research conducted in general, it can be difficult for forensic specialists to remain up to date on research trends in their own field much less the countless other disciplines in the forensic sciences. We will provide those attending our presentation with a "snapshot" of current trends in forensic entomology research from around the world with an emphasis on research being conducted in the United States.

Initially, research on insects colonizing carrion was viewed as an attempt to better understand succession and nutrient recycling in terms of general ecology (Payne 1967). However, over the course of the past 20+ years, the aim and direction of such research has been largely focused on the use of insects as evidence in criminal investigations resulting in the development of the discipline of forensic entomology. Today, forensic entomology receives considerable attention from entomology and biology departments in universities throughout the United States and world.

The goal of this presentation is to provide those attending with an update on trends in forensic entomology. Published information on forensic entomology research was gathered through a search of the CAB database via Texas A&M University. Additional information on current research was gathered by contacting individuals from around the world who are known to have active forensic entomology programs. Articles located through the search were broken down into several categories; research topic, locality of research, year published, and journal. Participants will be provided this information with special reference to states in the U.S. with ongoing programs in forensic entomology. Additional information will also be given on events occurring at the first North American Forensic Entomology Conference, which took place August 7-9, 2003, in Las Vegas, Nevada.

Articles with forensic entomology in the title or as a key word were located as far back as 1983. The number published gradually increased from 3 that year to 50 in 2001. A total of 22 countries published 101 articles on forensic entomology from 1999 through 2003. The top five countries during this period that produced articles in English according to the CAB database search are the United States, France, Italy, Germany, and Australia. Other countries with significant contributions have been Thailand, Canada, and India.

Articles from 1999 through 2003 were grouped in one of seven research areas; insect biology (26%), review articles (16%), succession studies (15%), DNA (14%), case study (12%), entomotoxicology (10%), and morphology/taxonomy (7%). These articles were primarily published in three locations; *Forensic Science International* (31%), *Journal of Forensic Sciences* (14%), and the *Journal of Medical Entomology* (9%). Additionally, it was determined that forensic entomology research had been conducted in 18 states during this period: TX, AL, SC, WV, CA, VA, NY, OH, GA, HI, MD, CO, LA, TN, MI, FL, MO, PA, and the District of Columbia. A summary of this survey and bibliography is located at: <http://stephenville.tamu.edu/~jktomberlin/forensic.html>

#### Entomology, Literature, Research