



Pathology Biology Section – 2007

G70 Insects and Time Since Death: What Do We Really Estimate?

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After attending this presentation, attendees will gain an understanding of some of the limitations and constraints of time of death estimates based on entomological evidence

This presentation will impact the forensic community and/or humanity by making attendees aware of the problems and constraints associated with time since death estimates based on entomological evidence, the participants will be better able to evaluate the significance of these estimates to their investigations.

Forensic entomology is a powerful tool for use in the estimation of the minimum period of time since death in many cases. There are, however, certain constraints in its application that must be kept in mind. First, what is provided is primarily an estimate of the period of insect activity on the body, rather than an estimate of the actual period of time since death. While these periods are frequently quite similar and the estimate provided is close to the actual time since death, they are not identical. There also exist a number of confounding factors beyond the control of the entomologist and/or crime scene personnel that will further serve to reduce the similarity between the estimate and the actual postmortem interval. These include: concealment of the body, incomplete collection of relevant materials by scene personnel, presence of chemicals on or around remains, seasonal and geographic variations in insect distribution, microclimatic factors, and lack of common sense. Additional problems lie in approaches to interpretations of data, often resulting in estimates produced that can not be supported by the current state of the sciences involved.

Postmortem Interval, Insects, Entomology