H87 Interdisciplinary Forensic Science Workshops: A Venue for Data Collection

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After attending this presentation, attendees will understand the need to record observations regarding the decomposition process of animals used as models for conducting forensic workshops; understand the value of such observations for the development of research objectives; and understand the value of such observations from various regions of the United States, or even the world, for future forensic investigations.

Forensic workshops are primarily conducted to educate law enforcement personnel on the novel use of various disciplines as a means to solve crime. This presentation will impact the forensic community and/or humanity by demonstrating that these workshops can also be used to record observations on insect and botanical demographics and taphonomy.

Workshops are a common vehicle for educating law enforcement personnel on the application of entomological, anthropological, and botanical techniques to gather forensically important information. From June 8 to June 11, 2004, such an interdisciplinary workshop was conducted outside of Charlotte, NC. The American Academy of Applied Forensics, under the auspice of the Central Piedmont Community College, hosted this workshop.

In preparation for this workshop, three pigs weighing individually between 40 to 60 kg were sacrificed and placed in the field on June 4, while three pigs of similar size were killed and placed in the field on June 7. The carcasses were placed at three sites. Two of the sites, separated by approximately 20m, were in a wooded lot, while the remaining site was in a sunlit area approximately 10m from the nearest wooded site. Two carcasses, one from each kill date, were placed approximately 1m apart at each site.

During the afternoon session on the last day of the workshop, participants collected three *Chrysomya rufifacies* (Macquart) (Diptera: Calliphoridae) 3rd instar maggots from one pig that was killed on June 7; these data represent the first record of this forensically important insect species in North Carolina. Furthermore, these data provide evidence of this species expansion into new geographic regions of the United States.

The interdisciplinary nature of this workshop allowed participants to understand the intersection of entomology, anthropology, and botany. The new entomological information gathered may have implications for body decomposition patterns and rates, thus leading to new research ideas to further contribute to forensic science applications.

Anthropology, Entomology, Botany

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