Scholars Academic Journal of Biosciences
Abbreviated Key Title: Sch Acad J Biosci
ISSN 2347-9515 (Print) | ISSN 2321-6883 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Life Sciences

Cobweb Presence Solved the Mystery in a Simulated Burglary Crime Scene: Rare Animal Forensic Investigation Report

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DOI: https://doi.org/10.36347/sajb.2025.v13i04.012 | **Received:** 10.03.2025 | **Accepted:** 19.04.2025 | **Published:** 24.04.2025

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Abstract **Case Report**

Forensic science is a known science popularised by movies and media. It is a broad spectrum of sciences to investigate the situations after getting the facts and to establish what happened through crime reconstruction. Forensic crime scene investigators play a vital role in solving crimes mostly based on non-living physical evidence such as footprints, fingerprints, hairs, fibres etc. Animals have relevance to crime scene investigation without necessarily being the main object of the crime, but associated indirectly, in also other situations. Insect evidence may provide clues when dealing with dead bodies. It is important to fully understand the context of the presence of animals or insects irrespective of size and place, whether dead or alive. Cobweb, also known as Spiderweb found in unused areas in residential, godown, and stock rooms. In the present case study, the author also a former Government Forensic Crime Scene Investigator visited a burglary crime scene, and the offender was fixed based on the presence of Spiderweb on the roof of the house.

Keywords: Forensic Anthropology, Animal Forensic, Cobweb, Burglary, Case study.

INTRODUCTION

Forensic science is a broad spectrum of sciences to investigate the situations after getting the facts and to establish what happened through crime reconstruction. In traditional forensic Science, crime solvation is based on the recognition of physical evidence, also known as silent witness found at the occurrence place (Henry & Elaine, 2013). Such pieces of evidence include footprints (Nataraja and Hairunnasha, 2020), handprints (Nataraja, Ivan and Ariel, 2024), soil (Nataraja & Josua, 2018), hairs (Nataraja and Nor Amalina, 2018a), bloodstains, seminal stains (Subham *et al*., 2024), handwriting (Nataraja & Kaja, 2019) and many others. Sometimes, the offenders are so intelligent and used to confuse the investigators through their tactics (Nataraja, 2020a, Nataraja *et al*., 2020b). The emergence of wildlife forensics serves as a boon in solving long pending cases of wildlife crimes (Ajay & Nishant, 2023). Wildlife forensics have proven to be fast, accurate and reliable criminal investigation processes (Alexandra *et al*., 2023). It is also gaining significance that concerned with the application of scientific analysis to support wildlife law enforcement. From the available biological samples, such as flesh, tissues, hairs, and skin, wildlife forensics focuses on the identification of such non-human biological samples, rather than traditional forensic disciplines such as ballistics or human DNA profiling. (Cartina, *et al*., 2022). Examination of wildlife samples is used to verify products in trade and the detection of criminal activity. It is to investigate wildlife crimes, such as poaching and trafficking of protected species most wildlife protection laws refer to specific species and may also relate to the source or age of a wildlife product (Sushanto *et al*., 2020).

Another interesting area of study is the application of insects/anthropods in criminal investigation is Forensic Entomology. Through the study of insects, Forensic Entomologists could solve homicidal cases and also help to establish the postmortem interval (PMI) of a dead body and if the death has occurred due to poisoning or overdose of drugs. Spider is an insect, comes under anthropod and belongs to the phylum Arthropoda. Specifically, spiders are classified within the class Arachnida, known for having eight legs and typically having a body, divided into segments, cephalothorax and abdomen. Spiders used to spin webs through a fluid, silk produced from the spinnerets, in the abdomen, that solidifies and forms thread. They build webs by moving their legs and using silk to create a specific pattern with a frame and then adding radial and

spiral threads. They usually build in unused areas under dark places to catch prey comfortably.

CASE STUDY

As a field criminalist (Mobile Forensic Scientist), I used to attend the scenes of crime whenever called by the Police Inspectors from the Police stations, seeking forensic assistance. One day around 11 am, I received a call from an Inspector of my jurisdiction, requesting me to visit a burglary crime scene and assist the investigation. I immediately proceeded and reached the police station and then the burglary scene with the Police Inspector. It was a medium-sized house with a tiled roof. On entering the house, I saw a hall of 15 feet in length and 10 feet in breadth in a north-south direction. At the eastern side of the hall is a small kitchen of 7 x 6 feet. A separate bathroom with a toilet was present with a size of 5 x 6 feet. Behind the house, there was a vacant site and some houses were found after the vacant site. It appears as an extension area, located on the outskirts of the town. In the hall, a metal almirah, a long bench, and moulded chairs were found. The metal almirah was found open, and the clothes and other items were found scattered here and there. The family members living here were a husband (40 years), a wife (36 years), and two daughters 12 and 8 years old. The complainant, the husband said that he kept 54 sovereigns of gold jewels and two lakhs forty thousand rupees cash in the inner compartment of the metal almirah which was found missing. He also pointed out a hole in the tiled roof and the removal of tiles by the culprit who entered the house and committed theft. He said that he was away for two days with his family to attend a function. On return, he found the house was ransacked and committed theft by unknown persons.

CRIME SCENE EXAMINATION AND RECONSTRUCTION

I have examined the scene and no damage was found in the almirah. A fingerprint examination was done and no foreign fingerprint was found except the inmates' prints, which were used regularly. I came out of the house and climbed to the outer opened tiled roof. I peeped through the removed tiles. Only three tiles were found removed, the roof hole was so small that the head could not enter into the small hole on the roof. Surprisingly, under the hole, I noticed a spider web in the wooden reaper and the spider moved slowly in the net. If anybody entered through this hole, the spider web would have collapsed but the cobweb is intact. On reconstruction (Nataraja, 2020), it is crystal clear that outsiders never entered through the hole but the complainant intentionally removed the tiles and created a fake scene, accounting for a property loss. He had only five sovereigns of gold jewels that were pledged in a private money lender shop.

CONCLUSION

If a fake scene is created to manipulate or deceive to gain unfair advantages, it is considered a crime and punishable under the law. In this alleged burglary scene, the presence of cobwebs under a tiled roof formed a piece of unusual animal evidence, ruled out the crime occurrence and solved the mystery. Later on, the house owner was prosecuted by the police for his foul play and sentenced. Thus the fabricated scene was identified and solved forensically based on animal/insect forensics.

Acknowledgement

- Tamil Nadu Forensic Sciences Department, India
- Tamil Nadu Police Department, India
- Management and Science University, Selangor, Malaysia

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