

FORENSIC ENTOMOLOGY

Supervision and Implementation: Jens Amendt, Lena Lutz, Ildikó Szelezcz, Krzysztof Szpila

10.8. Arrival / Welcome Reception 12:00 – 13:30

Afternoon:
The Science of Forensic Entomology

The Science of Forensic Entomology
Exploring Research Challenges & Standards

11.8. Morning: *The Application of Forensic Entomology*

Afternoon: *Some Like It Hot –
Crime Scene Temperature*

The Application of Forensic Entomology
Case Studies & Expert Opinions

12.8. All Day: *Field Work – Searching, Sampling
and Rearing Insects*

Some Like It Hot
Crime Scene Temperature Reconstruction

13.8. All Day: *ID Your Fly, Part I*

Field Work in the Field
Pig Carcasses & Insect Sampling

14.8. All Day: *ID Your Fly, Part II*

ID Your Fly
Identifying Blowflies & Larvae

15./16.8 *Independent Group Work*

Forensic Entomological Report
In-Depth Group Research & Analysis

17.8. All Day: *Case Work & Report Writing*

Case Work & Report Writing
Preparing Professional Expert Reports

18.8. Morning: *Trial Day – Courtroom Presentations*

Departure / Farewell Lunch 12:30



Hands-On Training • In-Depth Knowledge • Practical Skills • Mock Trial



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Afternoon: The science of forensic entomology

Forensic entomology draws on a variety of research disciplines, including developmental physiology, chemical ecology, molecular biology and AI. While this range is exciting from a scientific point of view, it also poses a major challenge. This afternoon's session will explore the opportunities and challenges of this diversity, while also providing information on standards and promoting good scientific practice.

11.8. Morning: The application of forensic entomology

Based on a wealth of scientific data, the main task of forensic entomology is to answer legal questions posed by the police and prosecutors. This morning's session will use case studies and reports to demonstrate in a practical manner the nature of these questions, how they can be answered in the form of an expert opinion, and the special features of forensic expertise.

Afternoon: Some like it hot – reconstruction and modelling of the crime scene temperature

The essence of serious and reliable forensic entomological work is often based on knowledge of the underlying temperature of insect development. This afternoon, we will demonstrate how to approximate the relevant temperature and present our preferred method of reconstruction or modelling. Participants will need a laptop with R-Studio already installed and basic knowledge of working with R.

12.8. All day: Field work – searching, sampling, storing and rearing of insect evidence

Practice and experience are crucial; on this day we will deepen our understanding of decomposition by examining various pig carcasses in the field. We will also practise sampling insect traces on the carrion. We will also present and discuss storage and rearing options; moreover, these samples will form the basis of an entomological report on the time of death of the animals. This report will be prepared in groups and presented in a simulated court case at the end of the workshop.

13.8. All day: ID your fly, part I

This day is dedicated to identification exercises on adult blowflies and other fly families that are relevant to forensic science. There will also be a focus on the material collected the previous day.

14.8. All day: ID your fly, part II

This day is dedicated to identification exercises on larval stage of blowflies and other fly families that are relevant to forensic science. There will also be a focus on the material collected the previous day. We will also explore forensically relevant beetle families.

15./16.8 Independent and autonomous group work => the forensic entomological report

Working in groups, participants will research the necessary data on the insects' ecology and biology found at the scene, reconstruct the scene's temperature, and take the first steps towards evaluation and assessment.

17.8. All day: Case work and Report writing

The respective groups will have the opportunity to discuss their work with the supervisors and ask questions about the preparation of expert reports. The latter will be supported by a presentation of three selected cases and corresponding expert reports from the Frankfurt Institute. Ultimately, a multi-page report is submitted at the end of the day.

18.8. Morning: Trial day – testifying on the report

Each group will summarise/present the key findings of their report and then answer questions in a mock public court hearing.

Departure /Farewell lunch 12:30