



**The Geological Society of London Forensic Geoscience Group (FGG)
The International Union of Geological sciences (IUGS), Geosciences for Environmental Management (GEM)
Geoforensic International Network (GIN)**



Geologists and police officers search for a grave in Europe (after Donnelly/FGG 2008)



Human remains found at a crime scene (after Donnelly/FGG 2008)



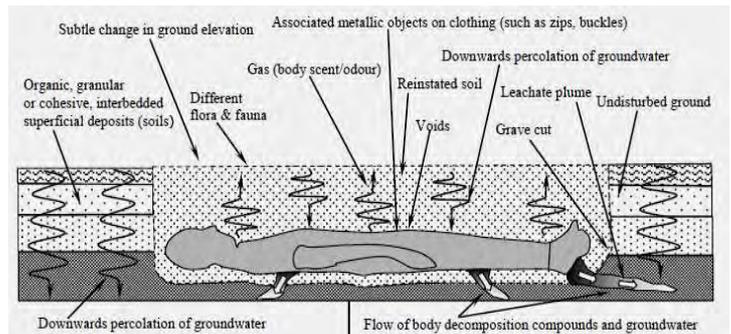
Limestone behind Bin Laden, in 2001, identified a particular location (after Al-Jazeera News)

What is Forensic geology (Geoforensics)?

Geoforensics (known also as Forensic Geology or Forensic Geoscience) is the application of geology to criminal investigations. Forensic geologists may assist the police in some types of crimes to help determine what happened, where and when it occurred, or to help search for homicide graves or other objects buried in the ground. In a law enforcement context, geoforensic specialists may support the police in two broad fields of geoforensics, geological (trace) evidence and search

Search

Some geological methods and techniques may be used to help the police search for locating (and sometimes the recovery of) objects buried in the ground, including for example, homicide graves, mass graves related to genocide, weapons, firearms, improvised devices, explosives, drugs, stolen items, money, coinage and jewellery. These searches may take place in urban, rural and remote locations, in both the terrestrial (land) and marine environments. A search is the application and management of systematic procedures, combined with appropriate detection equipment to locate specified targets (or objects). It is the skill of looking for a specific object and the art of finding it.



Conceptual geological model for a body in a grave (after Donnelly/FGG 2008)



Objects with soil which typically may be associated with a crime (after Donnelly/Emergency Global 2010)

Geological (trace) evidence

This involves the collection, analysis, interpretation, presentation and explanation of geological evidence. Geological trace evidence can vary considerably and may include for example; rock fragments, soils and sediments, which occur naturally in the ground, artificial (anthropogenic) man-made materials derived from geological raw materials (such as bricks, concrete, glass or plaster board), or micro-fossils. These may be transferred onto the body, person or the clothing of a victim or offender. The huge variability of rocks and soils in the ground is helpful in potentially placing an offender or item at a particular location. These samples may be taken from a crime scene, human remains (for example from skin or fingernail scrapings), vehicles, clothing or other objects. A forensic geologist may be able to assist the police to eliminate potential suspects, in determining the possible location where a crime took place, linkage of the offender or items to a crime scene or victim or to assess the possible movement of human remains.

FGG & IUGS-GEM, develop geoforensics and best practise world-wide, for further details contact:

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