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Forensic Geosciences applied to the presence or absence of a corpse

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Normally, when geoscientific methods are involved in forensic investigations, it is to search and excavate missing bodies, generally buried under the ground. This kind of research is not always simple and clear. There are several examples in which the discovery of an unexpected burial has demonstrated how this research can be complicated [1].

Nevertheless, recently, these geoscientific techniques have become relevant to not just crimes involving homicides and buried bodies, but also to environmental, cultural, or vandalism crimes [2].

Figure 1: Photograph of illegal dumping in a protected cultural site

There are many cases in which the use of geoscientific techniques can help. These can frequently involve the research of pollutants or illegal dumping underneath the soil surface. For example, the chemical and physical modification of soil both on the surface and at depth in illegal dumping areas of protected cultural sites as depicted in *Fig. 1.*

The subsurface features shown in Fig. 1 creates the perfect detectable contrast.

Other uses of a forensic geoscientific approach are to confirm the reliability of witness or suspects' statements in vandalism or cultural heritage crimes and to detect any discrepancies in their statements that may be present [3].

As a final point, it is very important to share the findings of such investigations with other forensic geoscientists in order to build a solid and robust self-confidence in the methodology applied to different situations.

References:

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