Keynotespeaker

Archaeo-geomorphology:
A tool for understanding past landscape functioning

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Abstract

Most archaeological sites represent areas of limited spatial extent in the past. Archaeologists seek to understand the events represented by the archaeological material but the landscape in which these events took place often remain elusive. However, today a combination of classical and more recent techniques available at reasonable cost, allows better understanding of past landscapes than ever before.

In this talk, I'll provide examples of landscape reconstructions using a combination of approaches including remote sensing, geophysics, microfossil analysis, sedimentology and - needless to say - dating.
Historical and recent aerial photographs combined with modern high-resolution LIDAR scans reveal important patterns of the past landscape. Four wheel drive ATVs can be equipped with a range of geophysical equipment including resistivity meters, magnotometers and susceptibility meters useful in locating archaeological sites and exploring landscape patterns.
Using such spatial information profiles can be dug at strategic geomorphological points and layers investigated using sedimentological techniques, dating such as optically stimulated luminescence and analysis of pollen and diatoms to reveal depositional and vegetational histories.

The combination of such approaches may be termed archaeo-geomorphology rather than geoarchaeology since it allows a general understanding of past landscape functioning, a framework in which many archaeological periods and finds can effectively be put into.

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