

GEOPHYSICS | SHARING IS CARING

Kimberley Teale ACIfA (6144), Programme Manager – Digital, DigVentures

I love geophysics. I love the questions it can answer without destruction, and the pictures it can paint of landscapes. As professionals, we know that geophysical surveys add value to projects far beyond just ascertaining whether archaeological remains or gas pipes are present on site. If used as part of a multi-disciplinary approach, geophysical surveys can help answer the seemingly unanswerable.

Outside of the profession, there is a growing awareness of its potential and a desire to understand what geophysics does and how to interpret the data. For years, geophysics has been utilised by amateur archaeology groups, by university students and research groups, and by commercial companies to satisfy planning conditions for construction. By bringing geophysics to the primarily community-based work of DigVentures, we have found that it is being utilised by a much wider audience than expected, for adjacent professions or to satisfy curiosity. We recently delivered two seminars covering 'an introduction to geophysics', where we explained the basics of geophysical survey and data interpretation and presented the audience with geophysical results to interpret. Some 435 people signed up for the events, with reasons cited including 'to learn about geophysics as I commission surveys for work', 'it's closely related to my work' and 'to understand the data'.

Out of 269 registrants for the first event, 33 classed themselves within the archaeology discipline either as students or as professionals. Other participants stated occupations including consultants, design managers in construction, engineers, historians and town planners. Out of 166 registrants for the second event, 11 classed themselves within the archaeology discipline, with other

participants stating occupations of architects, county councillors, local government and HER officers.

Our seminar registrants expressed thanks at being taught skills previously assumed only for specialists. Many had never really understood the data, or understood that different techniques could achieve different results, especially when used

together. Understanding that a one-method-fits-all approach isn't the best approach was key. The overwhelmingly positive feedback we received from the participants suggests we have provided the foundations that will help heritage professionals make informed decisions about the need for geophysics, the most suitable applications, and the use of multi-disciplinary approaches.

Geophysics for Beginners
How to choose the right technique

Property: colour and shape

Interpreting the data

Interpretation is an holistic process and its outcome should represent the combined influence of several factors.... (David, 1995)

Negative anomalies

Positive anomalies

An absence of anomalies is not necessarily an absence of archaeology...
...and the presence of anomalies is not necessarily the presence of archaeology...

Screen shots from the online seminars covering 'An introduction to geophysics'

Kimberley Teale

Kimberley is an archaeological geophysicist experienced in project management and delivery, with a demonstrated history of working in the heritage sector. With a background of running large-scale infrastructure and linear survey schemes, she is committed to providing high-quality data and deliverables. Digital innovation and development are a key part of her role, and she is integral to the development of DigVentures' non-intrusive digital survey techniques and their GIS capabilities.

