Oak Archaeology Wales CIC

RUPERRA EDUCATION & WELLBEING PACK (SECONDARY / HIGH SCHOOL)

The Ground Remembers – Exploring the Roman Story of Ruperra

Prepared by **Daryn Groves**, Director – Oak Archaeology Wales CIC In collaboration with **Cwmwl Clyd (Cosy Cloud), People's Collection Wales, RCAHMW, Heneb, GGAT,** and the **National Lottery Heritage Fund**

Digital Terrain Model (DTM) visualization showing topographic relief and features near Ruperra. Data derived from DataMapWales elevation data, © Welsh Government / licensed data. Contains public sector information licensed under the Open Government Licence v3.0. Image processed and annotated by Daryn Groves.

The past never vanishes. It waits quietly beneath our feet.

Introduction

Echoes Beneath the Field invites students to explore how scientific investigation, creative thinking, and heritage preservation come together in real archaeology.

At **Ruperra Home Farm, Draethen (Caerphilly)**, a series of non-invasive field surveys revealed what may be one of South Wales's most significant hidden landscapes — a **Roman military–funerary complex**.
Through the combined use of **dowsing**, **LiDAR**, and **Ground-Penetrating Radar (GPR)**, the project has uncovered evidence of ancient structures, possible burial zones, and reused Roman masonry within later estate buildings.

This pack encourages learners to examine how archaeology links the scientific with the human — and how persistence and respect for place can give voice to forgotten stories.

Story: Echoes Beneath the Field

At first glance, the pastures of Ruperra looked ordinary — the kind of green expanse that might never give up its secrets.
But for archaeologist **Daryn Groves**, the ground itself seemed alive with possibility.

It began simply, with two **brass dowsing rods**, glinting in the early sunlight.
Held lightly, they shifted and crossed in certain places, tracing invisible lines that seemed to breathe beneath the soil.
The readings were logged carefully, each crossing marked by GPS.
Was this chance, imagination — or something more precise?

Weeks later, **LiDAR scans** confirmed subtle ridges and terraces where the rods had reacted.
Then came **Ground-Penetrating Radar**, slicing through layers of soil with waves of reflected signal.
On the laptop display, rectangles and corridors began to appear — deliberate, measured, unmistakably architectural.

The results were striking.
The surveys showed over **168 structural anomalies**, arranged around a central grid — the signature of a planned Roman site.

Among them were chambers aligned near an ancient watercourse, suggesting a **morgue or ritual washing area**, and linear features that matched rows of graves.

Within nearby estate walls, fragments of dressed **ashlar masonry** were identified — Roman stone, reused centuries later in **Ruperra Castle** and **Plas Machen**.
It was a cycle of memory and reconstruction: the Romans had left; the stones remained; the future had built upon the past.

For Daryn, the work was less about possession than listening.
"Sometimes," he wrote in his field journal, "you feel the land answer back — not with words, but with alignment."

Today, the surveys continue in partnership with **GGAT**, **Heneb**, and the **RCAHMW**.
Each new layer of data reveals more of the story — and more questions still waiting to be asked.

Final Reflection:

What began as faint intuition has become recorded evidence.
The field is no longer silent.
The ground remembers — and now, others are learning how to listen too.

Teacher's Guide

Curriculum Links

- History / Archaeology / Geography
- Humanities and Cultural Studies
- STEM (remote sensing technologies)
- Welsh heritage and bilingual literacy

Learning Outcomes

Students will:

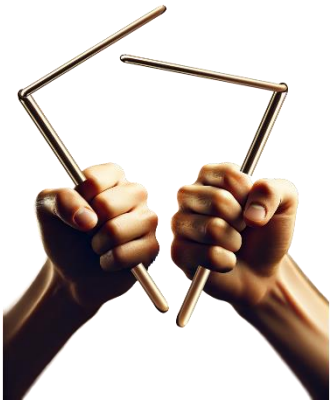
1. Understand how non-invasive survey methods reveal subsurface archaeology.
2. Analyse the link between intuition and evidence in archaeological discovery.
3. Explore the reuse of Roman material in later architecture.
4. Reflect on heritage ethics and community engagement.

5. Evaluate the idea of landscape as “memory.”

Suggested Approach

- Begin with a reading of *Echoes Beneath the Field* aloud or in groups.
- Use the discussion prompts below to connect science, history, and ethics.
- Encourage students to form hypotheses: *What kind of site was Ruperra? Why here? What remains unseen?*
- Integrate cross-curricular tasks: mapping, creative writing, bilingual interpretation, or digital storytelling.

Methods Summary



Dowsing

A traditional sensitivity-based technique that responds to subtle variations in ground density, magnetic balance, or moisture.
At Ruperra, brass rods indicated alignments later confirmed by LiDAR and radar data.

LiDAR (Light Detection and Ranging)

Airborne laser scanning used to create high-resolution terrain models.
Revealed rectilinear terraces and possible building platforms beneath vegetation.

GPR (Ground-Penetrating Radar)

Subsurface imaging method using electromagnetic reflection.
Exposed structures up to 2 m deep: chambered rooms, walls, and roadways.

Archival Research

Desk-based assessment identified parallels between reused Roman ashlar masonry at Ruperra Castle and nearby sites, suggesting systematic post-Roman stone recovery.

Discussion & Analysis Questions

1. How did the use of different survey methods strengthen the overall interpretation of the site?

2. What might the combination of morgue, watercourse, and aligned graves suggest about Roman ritual practice?
3. Why is it important to archive the data with the **RCAHMW** and **HER**?
4. In what ways can ancient materials be "recycled," and what ethical questions does that raise?
5. How can dowsing and intuition coexist with scientific precision in archaeology?
6. What skills are essential for field archaeologists working on long-term landscape projects?
7. If you could design the next phase of investigation, what would you include — and why?

Creative & Reflective Activities (Cwmwl Clyd)

1️⃣ Echo Map

Using tracing paper over a LiDAR image, outline the visible shapes.
Add imagined rooms, courtyards, or pathways that might once have existed.
Label them with possible functions (e.g., barracks, shrine, bathhouse).

2️⃣ voices from the Ground

Write a monologue from the perspective of:

- a Roman craftsman reusing older stones, or
- a 21st-century archaeologist discovering them again.

3️⃣ Field Mindfulness

Outside, walk slowly in silence for two minutes.
Notice each change underfoot — soft, firm, uneven.
Discuss how observation, stillness, and repetition relate to archaeological work.

4️⃣ Digital Sharing

Students can upload creative responses to **People's Collection Wales** or via **Cwmwl Clyd**, using tag:
#RuperraHeritageDiscovery

About This Project

“Echoes Beneath the Field” forms part of the educational and public-engagement programme for the **Ruperra Home Farm Roman Military–Funerary Complex** investigation, conducted by **Oak Archaeology Wales CIC**.

The project combines heritage science and community archaeology to promote understanding of Wales’s Roman past while supporting bilingual wellbeing learning. Findings are archived with the **Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW)** and the **Glamorgan–Gwent Historic Environment Record (HER)**.

Supported by **Cwmwl Clyd (Cosy Cloud)**, **People’s Collection Wales**, **Heneb**, **GGAT**, and the **National Lottery Heritage Fund**, this work celebrates the balance between technology, intuition, and cultural connection.

For resources and updates:
www.peoplescollection.wales | *www.cwmwlclyd.com*

Science listens. The land replies.