
HEREFORDSHIRE ARCHAEOLOGY

HISTORIC ENVIRONMENT RECORD REPORT



**FORESTRY COMMISSION PROJECT K: CREATING SHINE DATA FOR
LOW SENSITIVITY AREAS IN ENGLAND**

END OF PROJECT REPORT: HEREFORDSHIRE 2023 - 2025

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SEPTEMBER 2025

1 Executive Summary

Herefordshire Historic Environment Record (HER)/Archaeology Service successfully completed Project K commissioned by the Forestry Commission. This groundbreaking initiative involved comprehensive review and enhancement of archaeological data within Forestry Commission-designated Low Sensitivity Areas and their surroundings, creating a robust framework for informed land management decisions supporting both heritage protection and environmental goals.

The project was undertaken in 117 days (847 hours) and examined 43,300 hectares (20% of Herefordshire's landmass), rigorously applying enhanced assessment methodologies to create a comprehensive understanding of the county's archaeological landscape. This work offers significant potential for sustainable heritage management while supporting the Forestry Commission's targeted tree planting initiatives through improved archaeological risk assessment.

Key Achievements

- **Archaeological Discoveries:** Identified numerous previously unrecorded monuments including a newly discovered Iron Age hillfort, prehistoric cross-dykes, Bronze Age barrows, and Romano-British enclosures - elevating the understanding of Herefordshire's archaeological landscape
- **Enhanced Coverage:** The project reviewed 6,767 Monument records updating 467 existing records (10% of Study Area inventory), while creating 270 new Monument records (representing a 6% increase in evidence base).
- **Significant SHINE Expansion:** Increased Select Heritage Inventory for Natural England (SHINE) record coverage by 93%, adding 429 new designations while standardising all existing 457 records for improved consistency and management effectiveness
- **Methodological Advancement:** Established integrated use of LiDAR data with historic records, establishing new best practices for archaeological prospection and assessment that revealed landscape features previously undetected
- **National Benchmarking:** The systematic and consistent approach used established a review and creation process of 120 HER Monuments per day and 40 SHINE records per day.
- **Environmental Integration:** Aligned archaeological protection with nature recovery objectives by implementing Lawton principles ("bigger, better, more joined up"), creating coherent corridors that serve both heritage and environmental goals
- **Risk Mitigation:** Identified concerning patterns of unmonitored archaeological loss, particularly affecting medieval landscape features and historic farming buildings and structures, enabling proactive protection measures.
- **Data Standardisation:** Developed consistent templates and evaluation parameters for SHINE records, enhancing data reliability and accessibility for non-specialist stakeholders.
- **National Collaboration Model:** Established valuable proactive collaboration with a national cohort of local historic environment service teams, leading to revised working practices and new standards for archaeological data management with applications beyond the project
- **Policy Framework Enhancement:** Developed findings that directly support better administration of tree planting initiatives while informing wider council strategies for Nature Recovery through a more coherent approach to landscape regeneration

The successful completion of Project K demonstrated the value of proactive, technology-enhanced approaches to heritage management and provides a replicable methodology for the remaining 80% of the county. However, the study also revealed concerning patterns of unmonitored archaeological loss and highlights the urgent need for more coherently resourced management systems to protect this finite resource for future generations.

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3 Foreword

Herefordshire Council is pleased to welcome this report, which marks a significant contribution to our shared vision for a greener, more resilient county. The results from this project bring forward a robust and innovative approach to land management — one that balances delivering environmental benefit with the careful stewardship of our historic landscapes.

At a time when the challenges of climate change and biodiversity loss are increasingly urgent, the value of evidence-led decision-making cannot be overstated. This project has not only enhanced our understanding of over 43,000 hectares of Herefordshire's landscape but also delivered meaningful outcomes: new archaeological discoveries, improved risk mapping, and a 93% increase in record coverage. These insights ensure that tree planting (in line with the ambitious statutory targets set by Government) and nature recovery initiatives can proceed without compromising the historic environment — offering a powerful example of integrated land management in practice.

Herefordshire Council has declared a Climate and Ecological Emergency and is working to become carbon neutral by 2030/31. Our Local Nature Recovery Strategy, Natural Flood Management programme, and ambitious tree planting schemes—such as the Greener Footprints campaign—demonstrate our commitment to building healthy, biodiverse, and climate-adapted landscapes. The insights from this work will directly inform these efforts, helping to identify areas of opportunity while safeguarding irreplaceable heritage.

The project's use of modern technologies—particularly LiDAR and GIS—combined with the expertise of the Historic Environment team, sets a new benchmark for archaeological prospection and data standardisation. Its alignment with the Lawton principles of "bigger, better, and more joined up" reflects our county-wide strategy to strengthen ecological networks and build landscape-scale resilience.

We are grateful to the Forestry Commission for commissioning and supporting this important work. Recognising the interdependence of environmental and heritage outcomes has enabled an exemplary model of national and local collaboration. We also thank the many partners and council teams whose input has shaped the project's success.

As this report shows, heritage and nature recovery are not separate goals, but complementary ambitions. By ensuring that the past is understood and valued, we are better equipped to shape a future that is both environmentally responsible and culturally rich. Herefordshire Council looks forward to building on this work as we deliver on our climate and ecological commitments.

Councillor Elissa Swinglehurst

Deputy Leader of Herefordshire Council
Cabinet Member: Environment

4 Introduction

4.1 Purpose of Project K

- To review all existing Select Heritage Inventory for Nature England (SHINE) records within Low Sensitivity Areas as defined by Forestry Commission's v.3 Land Sensitivity dataset.
- To create, amend, remove or enhance existing SHINE records within Low Sensitivity Areas using the new (2023) SHINE polygon standards
- To actively prospect Low Sensitivity Areas for unrecorded archaeological monuments and landscapes to ensure the archaeological resource and heritage value is clearly understood.

4.2 Baseline data

- Herefordshire HER covers the entire unitary authority and historic county of Herefordshire. This represents 2180 square kilometres (c. 218,000 hectares).
- In Herefordshire the Forestry Commission's Low Sensitivity Areas (v.3, 2023) covered 34,100 hectares. This represented c. 16% of Herefordshire's land mass. Within the Low Sensitivity Area were 1945 individual polygons of various sizes.

4.3 Defining the Study Area

- In Herefordshire the project was designed to follow the concept of integrated nature recovery as outlined by the core principals of *bigger, better and more joined up* (Lawton, *et al.* 2010). As such the Low Sensitivity Areas were buffered and where appropriate combined / joined together removing smaller isolated 'islands' within the spatial data.
- This buffering also created additional cohesion to the dataset allowing closely positioned areas to be identified for nature recovery corridors and site / landscape specific connectivity.
- The buffering was set at a radial 30m as this gave the best coverage whilst not expanding the Study Area to an unreasonable / unachievable extent.
- The buffered Low Sensitivity Areas (hereafter referred to as the Study Area):
 - Covered 43,300 hectares. This was 26% larger than the Forestry Commissions Low Sensitivity Area.
 - It represented c. 20% of Herefordshire's land mass.
 - It was formed of 1295 individual polygons of various size.
- Therefore, this buffering increased the Study Area by 26% whilst reducing the polygon "islands" by 33%.

4.4 Study Area baselines

- Within the Study Area (either wholly or partially) were:
 - 475 existing SHINE records. This represented 32% of SHINE data within the county
 - 4,577 Monument records
 - 292 Archaeological Event records
 - 410 Listed Buildings
 - 18 Registered Parks and Gardens
 - 41 Conservation Areas

5 Methodology

5.1 The project methodology

The project methodology used in Herefordshire was outlined in our tender documentation. In brief we undertook a combination of the following:

- Responsive Resource Review: A review of each Monument record, event record or existing SHINE record to understand its setting and role within the landscape.
- Proactive Prospection: A review of all resources that included but was not limited to:
 - Aerial photographs (current and historic)
 - Environment Agency LiDAR mapping
 - Historic and modern mapping (including tithes and transcripts, enclosure act mapping and Ordnance Survey)
 - Historic Landscape Characterisation (HLC)
 - Current Landscape Characterisation
 - National Aerial Survey Mapping Programme Surveys (held external to the HER)
 - Academic and landscape based resources within council control
- After review and prospection, the relevant SHINE standards using the workflow guidance (2018) and revised polygon standards (v.2.0 from December 2023) were then applied appropriately.
- For newly identified sites which did not meet the current defined SHINE standard – an HER Monument record was created to ensure information was accurately captured.

5.2 SHINE data, workflow and historic curation.

- SHINE data has been created by Herefordshire Council's HER since 2009 – see Figure 1.
- A review of SHINE shows that:
 - 25% of the SHINE data was more than 10 years old
 - 50% of the SHINE data was created in the period 2016-2018
- In Herefordshire the creation of new SHINE data has been historically linked to the submission of Countryside Stewardship applications. Therefore, the process has been a reactionary one and based on customer need / requests.
- The current SHINE dataset workflow is covered within two HER processes:
 - Response to Historic Environment Farm Environment Report (HEFER) requests: This is a reactionary process that is based on external user need. Through Countryside Stewardship requests SHINE data is reviewed and new records added based on landholdings at a farm scale. Between 2019-2023 an average of 59 landholdings per year were reviewed representing a yearly average of 11,851 hectares. This study (Project K) therefore represented 3.7 years of HEFER applications in volume / size.
 - Recording of Monuments and Event records: as part of the daily work the HER adds records of recent archaeological activities or discoveries – where appropriate additional protection is added to these through the creation of a SHINE record.
- Project K is the first project that has been specifically targeted to review and manage SHINE data outside the normal workflow. As such it has highlighted issues and inconsistencies that can be applied more widely across the whole dataset.

- These include problems:
 - Within the methodological approach used to create SHINE data. This has relied on data creators dealing with SHINE data in a piecemeal and at times inconsistent way.
 - Within the SHINE dataset. It has not been consistently reviewed on a regular basis resulting in the SHINE data not reflecting recent landscape change.

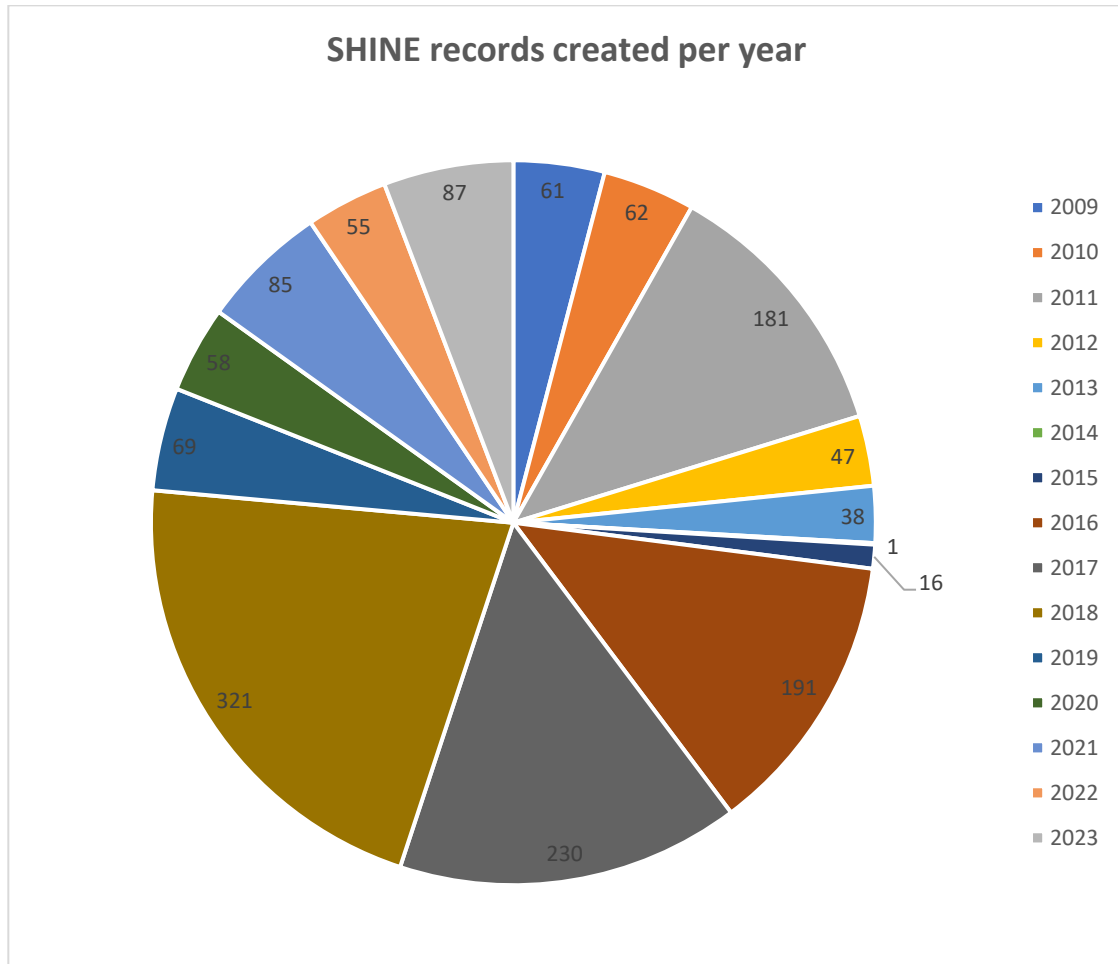


Figure 1: Illustration of Creation of SHINE between 2009-2023

5.3 Decision making process for Project K SHINE records:

- The structure of this project both locally and more widely by a national cohort of local historic environment service teams enabled a level of proactive collaboration and co-production not previously achieved. This led to important revisions in working practices through sharing of experience and via professional discussions and meetings.
- This method of working had significant value to both the project but also more widely to the SHINE process. It championed a new level of best practice and consistency.
- This new approach resulted in a unifying rigorous interpretation and detailed understanding of the landscape resource consistently applied.
- The project resulted in the production of standardised / template for SHINE records ensuring a consistent approach is maintained (see Appendix I)

5.4 The application of value-based judgements

- The current internal workflow guidance was extensively reviewed as part of the project. This was then rigorously applied in relation to both the extent of SHINE polygons as well as in a more consistent attribution of significance in the SHINE records. However, significance is a judgement-based criteria that would benefit from greater clarity. Additional national guidance will result in a more coherent and cohesive dataset.
- In Herefordshire, significance (high, medium and low) is defined based on the historic feature's importance at a county level. The rationale being that curation of the archaeological resource occurs at a landscape level, and this allows the application of a more nuanced and bespoke level of advice – highlighting elements that are rare within the county and our local landscape. This consistent approach also allows a more nuanced level of land management advice to be issued.
- Nationally, there are variations in approach and Herefordshire HER are one of many partners working on a single unified SHINE dataset. There is considerable debate around the application of significance values to historic environment features and a national strategic approach would be welcomed. The Herefordshire HER would be happy to support this piece of work at a national level with provision of examples, working practices and professional opinion.

6 Results

6.1 Project timeline

- The project commenced in January 2024. The initial period (January – March) tested all the core elements of the project in line with the tender documentation. After this initial phase the following elements took place between April 2024 and March 2025.

6.2 Work stream 1: Proactive prospection:

- The county was divided using a 5km square grid to ensure that all the areas within the Study Area were thoroughly investigated.
- Work commenced in the northwest of the county and followed a basic search pattern of working logically west to east and north to south. This approach was deviated from when dealing with shared landscape types (such as upland blocks or river network field systems).
- The level of evidence varied considerably across the county. A consistent element across the whole county was the Environment Agency LiDAR 1m digital terrain model. This when combined with other evidence proved a valuable and important tool to understand the presence and condition of extant monuments. It was the first time that Herefordshire's HER has used this dataset for a project like this and it has considerable potential.
- It was hoped that in the western areas of the county the Marches Upland Survey (Stoertz and Small 2004), would prove useful. The survey was undertaken by English Heritage (now Historic England) as part of their National Mapping Programme (NMP). The NMP was undertaken in the early 1990s and summarised the aerial photography (APs) resource well, with many historic APs being transcribed onto plotting sheets. Prior to this project much of this NMP report formed the primary evidence for the creation of SHINE records. However, when using the NMP against the 1m LiDAR this work showed that significant levels of previously well-preserved upland earthworks (mapped at a landscape scale) have been lost or significantly eroded through piecemeal farm and field improvements. This loss has largely taken place without archaeological observation suggesting a resource which is much more at risk than previously understood.

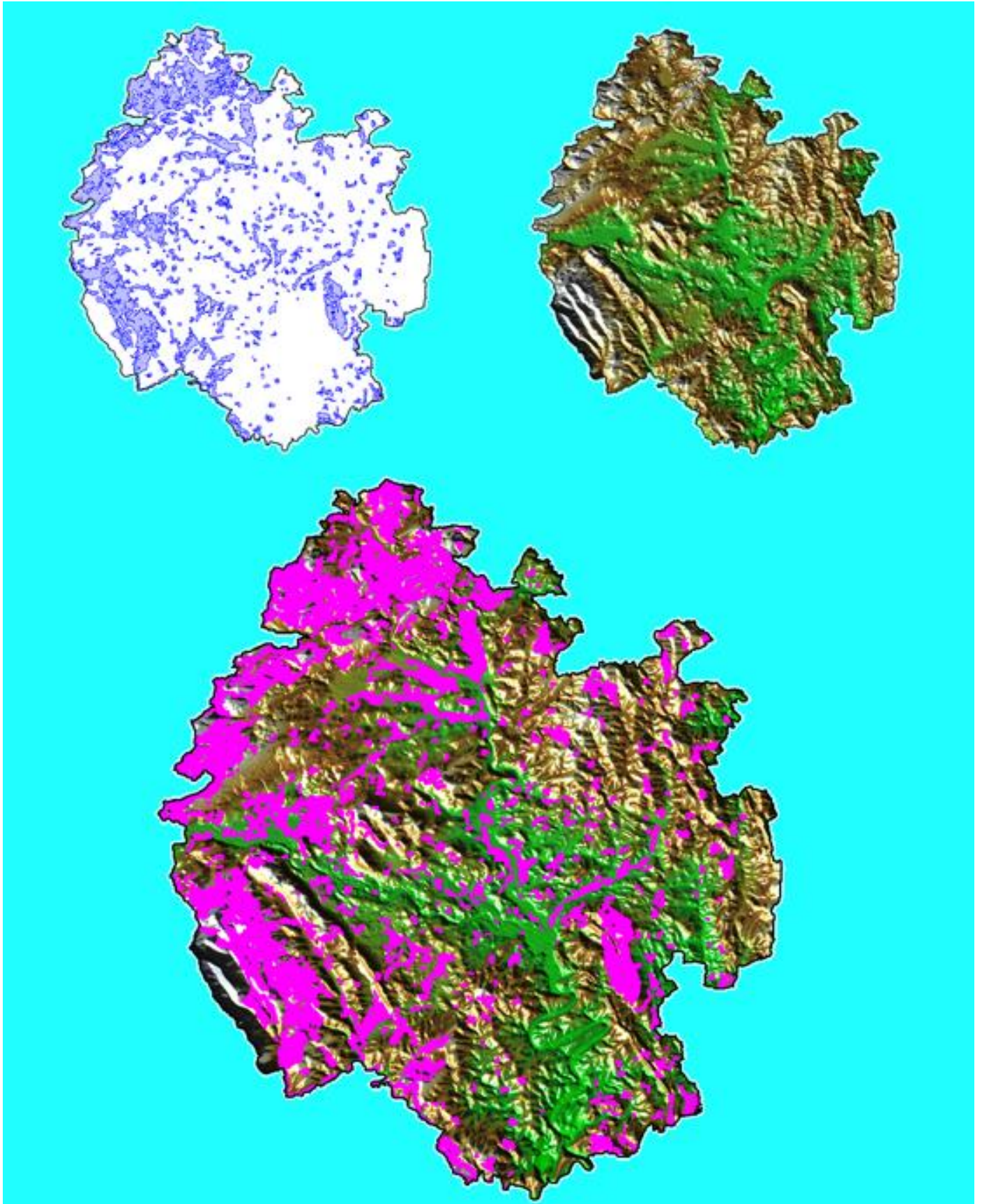


Figure 2

Top Left: Buffered Low Sensitivity Area (blue) – Study Area
Top Right: Landscape terrain map
Below: Study Area (pink) displayed over terrain map

6.3 Work Stream 2: Responsive resource review

- A review of each Monument record, Event record or existing SHINE record was undertaken across the whole Study Area.
- This review took 44.5 project days to complete.
- This phase allowed a secure and consistent approach to be taken to the known resource.
- This review identified inconsistencies within the data and how it had been applied to the designation of SHINE records.
- The review identified areas of loss across the known resource giving a point in time reset and allowing for the reduction of some areas covered by SHINE record polygons and also the revocation of a significant number of SHINE records that no longer met the standard.
- The review also identified several areas where the resource was considerably larger and more extensive / better preserved than previously thought. This showed particularly when combining the HER dataset with the LiDAR resource allowing larger and more extensive areas to be plotted.
- Given the changes within the SHINE polygon standard it also allowed a reduction in the size of SHINE polygons by subdividing them according to individual monument types or by grouping similar features together.
- It also allowed more specific and targeted drawing of SHINE record polygons which were more cognisant of the end users land management goals (grouping similar elements such as extant earthworks).

6.4 Work Stream 3: SHINE standardisation

- All the SHINE records within the Study Area were standardised to ensure consistency of information and clarity for the user. This work included:
 - Ensuring that SHINE records were consistently named in a transparent and accessible way.
 - Writing a clear brief description of the feature(s) each SHINE record encompassed in an accessible way to ensure clarity for non-specialist users.
 - Linking the description to a live internet webpage on the [Herefordshire Through Time website](#) which displays more information about the monument/s that are being protected.
 - Ensuring consistency in ascribing a value score to the remains and a consistency in ensuring the SHINE record is characterised in a way that is transparent and accurately described the resource.

6.5 Issues and obstacles within the project

- The project was planned in such a way as to be as flexible as possible in delivery. This was partially due to a limited internal team capacity as well as delivering other agreed pieces of work throughout the 15 months available.
- There were two major issues within the project that delayed delivery elements. These were:
 - Issues with licencing and access to the main HER computer system (6 week delay whilst issues resolved)
 - A period of ill health, absence and phased return to work for the project lead (12 weeks delay).

- Both these issues had been recognised as potential risks within the risk register at the tendering stage and therefore mitigations were already anticipated. The project had been designed with significant resilience which was well supported with clear planning and good co-working.
- The delay resulted in workloads and project delivery points being restructured to allow key milestones to be achieved.
- The absence did result in the project not being as efficient as possible – which included the double handling of some data.

6.6 Project outputs

	HER Records Reviewed	HER Monuments Updated	HER Monuments Created	SHINE Reviewed	SHINE altered	SHINE Created	SHINE revoked
Total	6767	467	270	804	568	273	49
Project Days	58			14.5			

Figure 3: Showing core statistics across the project

6.7 Project outputs: Monument records

- The project reviewed the primary HER Monument dataset on multiple occasions throughout the project.
- 467 Monument records were enhanced (and in some cases completely re-written). This represented 10% of all HER records within the Study Area.
- An additional 270 Monument records were created for newly identified sites and landscape features. This was an increase of 6% to the Monument dataset within the Study Area. However, not all these monuments met the SHINE standard and therefore did not require an associated SHINE record.
- An additional 87 monuments were identified that fell outside the Study Area. These will be added to the HER within 6 months of the project ending and where appropriate will be added to the SHINE dataset. These were identified through the prospection element of the project and noted in passing.
- This project also provided an opportunity to validate and check data recently accessioned from the National Record of the Historic Environment (NRHE) in a separately funded project. This showed the importance of holding information about archaeological monuments within a single organised database to enable and better inform landscape management decisions. Where appropriate, these NRHE monuments were also enhanced.
- A management decision was made to not delete HER Monuments records for features that had been significantly eroded or lost. Instead, those records were updated to reflect their change in condition and where appropriate the associated SHINE record was revoked.
- The most common form of archaeological monument that had been lost or significantly eroded was associated with medieval cultivation (ridge and furrow, strip field banks and boundaries, lynchets and headlands). The next most common were non-designated buildings associated with farming, this included the loss of upstanding barns and folds specifically detached from the main farm and positioned in the upland zone. In many cases the upstanding elements were lost but the earthwork building platforms remained.

6.8 Project Outputs: SHINE records

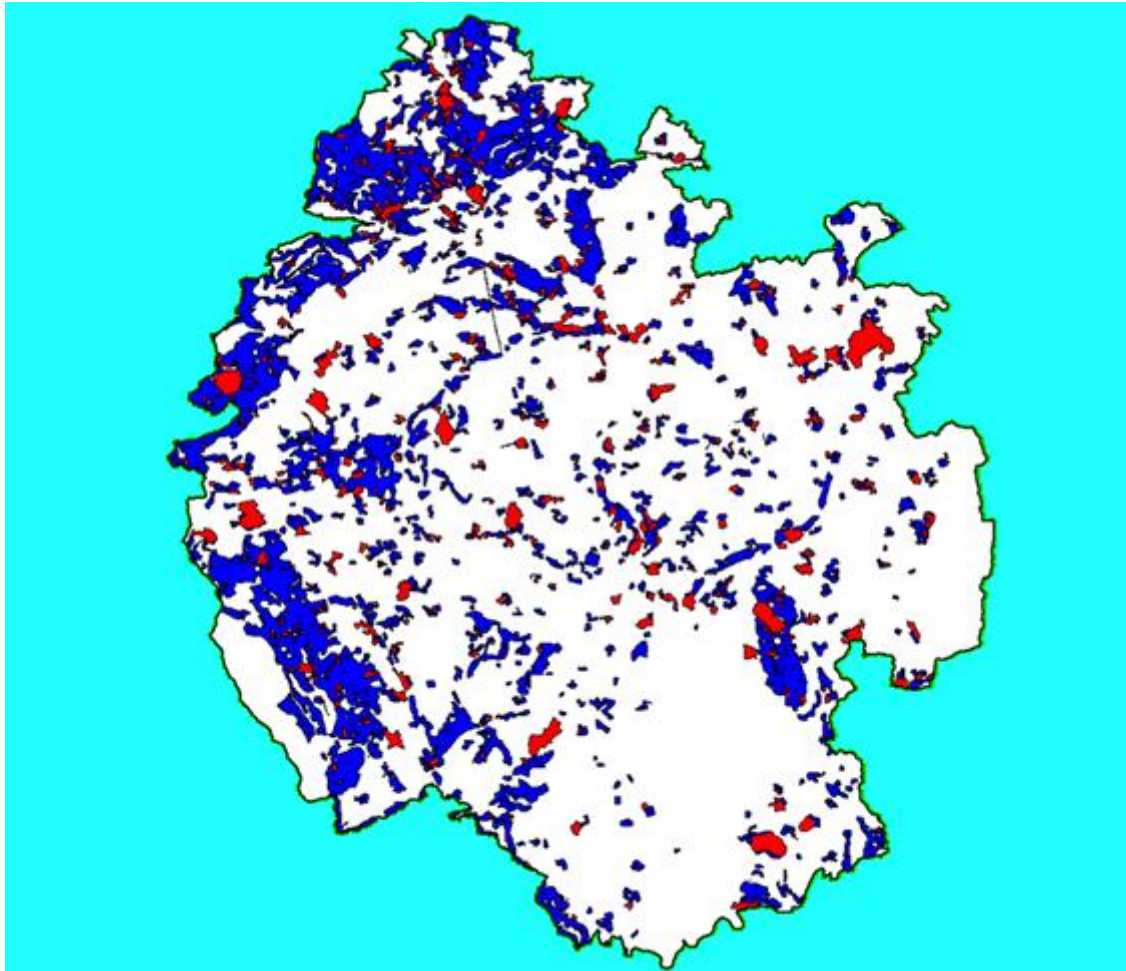


Figure 4: 2025 SHINE output (red) plotted against Study Area (blue)

- All existing SHINE polygons within the Study Area were reviewed and standardised if appropriate. This comprised:
 - Review of all existing 457 SHINE records.
 - Creating 429 new SHINE records of which 273 records were for either newly defined landscape monuments identified through the project or were for existing Monument records whose extent and preservation had previously not been recognised.
 - The creation of a further 156 SHINE records represented the subdivision of SHINE records with large associated polygons into separate SHINE records with smaller, more tightly defined polygons.
 - Altered or re-captured the spatial extent of 568 SHINE records to better match the current evidence base or adhere to the new SHINE standard.
 - Revoked / removed 49 SHINE records from the HER as the monuments no longer met the current standard.
- At the end of the project there were 886 SHINE records either wholly within the Study Area or whose boundaries intersected it to some degree. This represented an overall increase of SHINE polygons by 93 %.

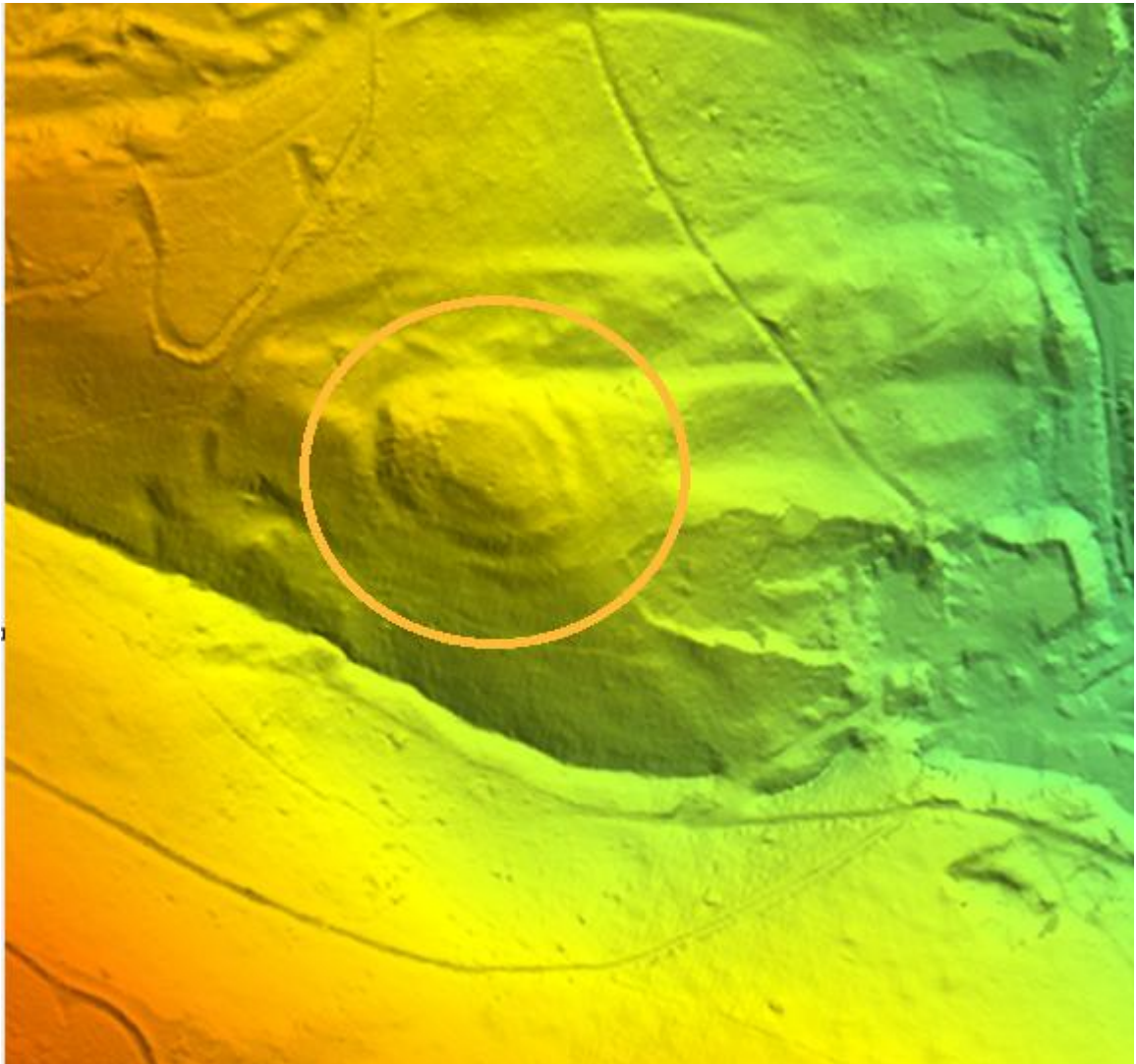
7 Case studies

The following monuments and their associated SHINE records have been highlighted as illustrative examples of the wider work this study has undertaken. They have been chosen to either show:

- different types of archaeological feature
- being an important monument in their own right,
- as an example of a more common, but well defined, monument type

In all cases the site has been highlighted using an orange ring and does not represent the extent of the SHINE feature.

1. A small multivallate enclosure of probable later prehistoric (Iron Age) date near Orleton.



This newly discovered 'hillfort' is relatively small and located in private woodlands. Its strategic position controls and defends access through the 'Goggins' and is a much smaller version of the nearby Croft Ambrey Hillfort. The monument is approximately ½ a hectare in size uses the nearby hillslopes to maximise its presence. It comprises a single enclosing bank and ditch system with a series of additional banks and ditches on its southeast side. This is the direction that faces out into the adjacent valley and from where it would look most impressive. Historic quarrying in the 19th century has impacted the form and possibly removed any other features.

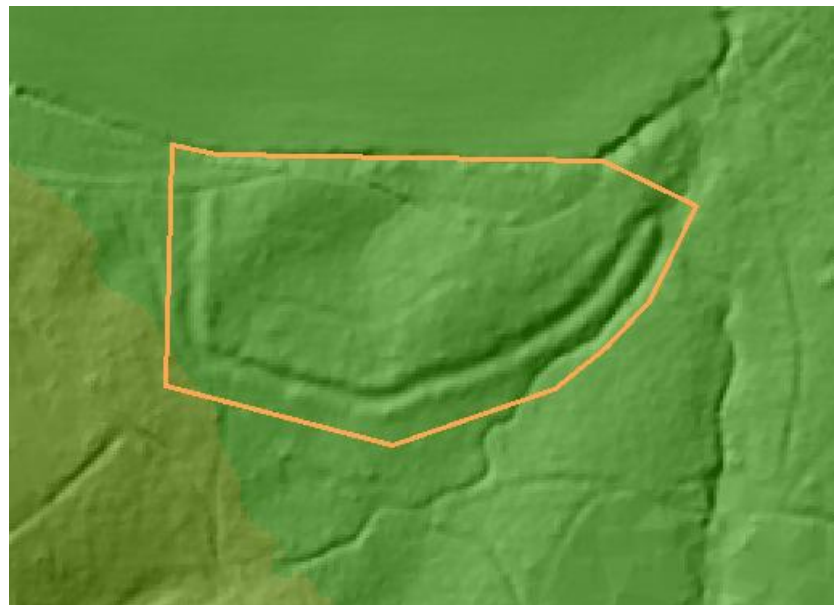
2. A cross dyke 180m to the north of the northern defensive rampart of the scheduled monument Backbury Hillfort, Dormington (in purple outline).



Cross dykes are defensive structures of prehistoric or early medieval date that consist of a single or multiple ditch and banks that divide the landscape forming either defences or land boundaries. In this case the cross dyke (ringed in orange) cuts across the ridge for a length of 300m isolating the hillfort (purple) which lies on the end of the ridge. It survives best in the south-western part as a ditch and as a more subtle earthwork bank in the north east. The dyke therefore seems to be designed as an initial line of defence enclosing and controlling an area of 200m of 'dead ground' before the principal hillfort defences.

3. An earthwork enclosure at Putley.

The irregular enclosure measures approximately 150m east /west and 80m north / south being preserved within an area of dense woodland. It has an area just over a hectare and consists of a single banked rampart partially contained by a ditch bounded on two sides by small streams. This form of earthwork in the county when excavated often dates to the Roman period – it



falls within an area of known Roman archaeology and as it is linked with spring heads might be possibly interpreted as having religious or ritual significance. An internal ditch is present along the south side indicating that the monument may not be defensive. It is possible that the enclosure continued to the north but is lost due to recent farming practices.

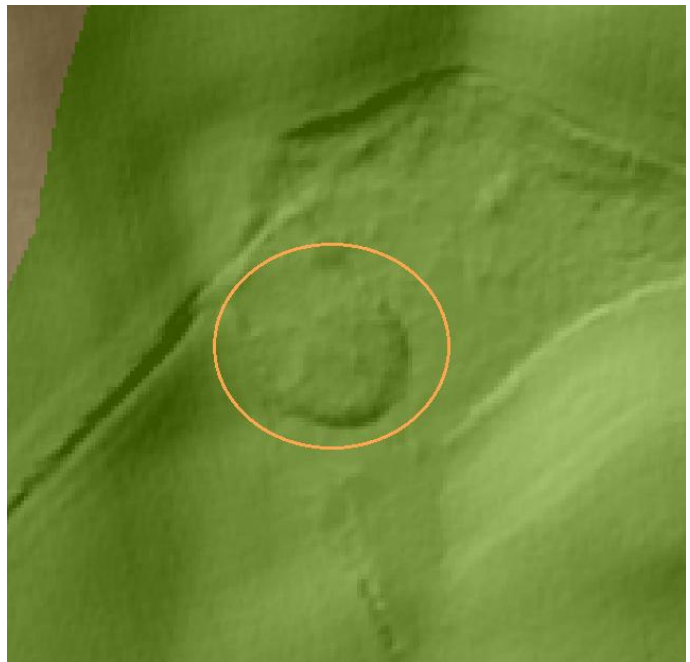
4. An earthwork mound in Moccas parish.

The mound is approximately 30m in diameter and overlain by an area of historic orchard ridging. It is cited on the edge of the flood plain on a river terrace. Its landscape position suggests this mound may well be of Early Bronze Age date and represent an extant round barrow. The mound has suffered erosions from ploughing in the medieval period but the upstanding elements have been preserved by the orchard from the worst effects of modern agriculture.



5. An Early Bronze Age barrow recorded in woods at Shobdon.

This mound is of a similar size to that seen at Moccas but is better preserved by the woodland growing around and over it. It measures approximately 35m in diameter with a clear well defined enclosing external ditch.

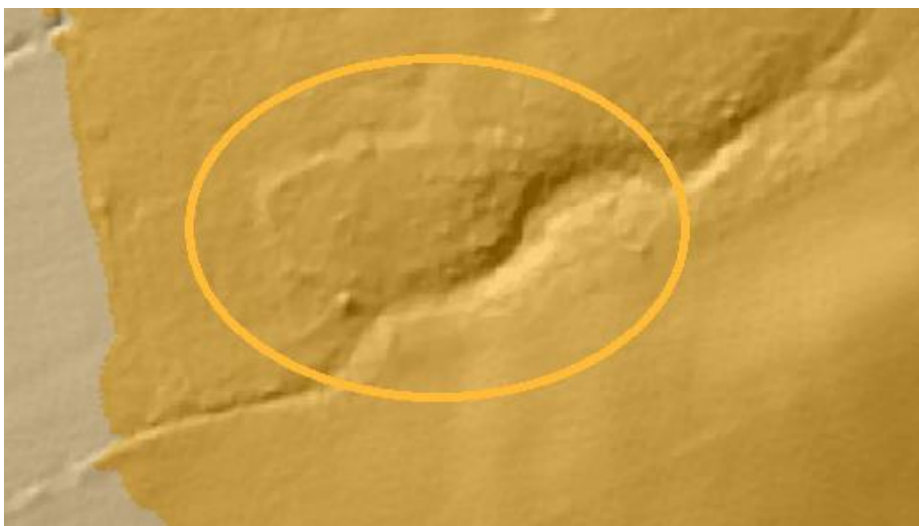


6. A large D-shaped oval enclosure in Garway.



This enclosure is of later prehistoric (Iron Age) or Roman date being identified from Google Earth satellite imagery taken in 2013. The enclosure is approximately a hectare in size with a double overlapping ditched entrance in the south west. These farmstead enclosures were both defendable as well as acting as corrals for holding livestock.

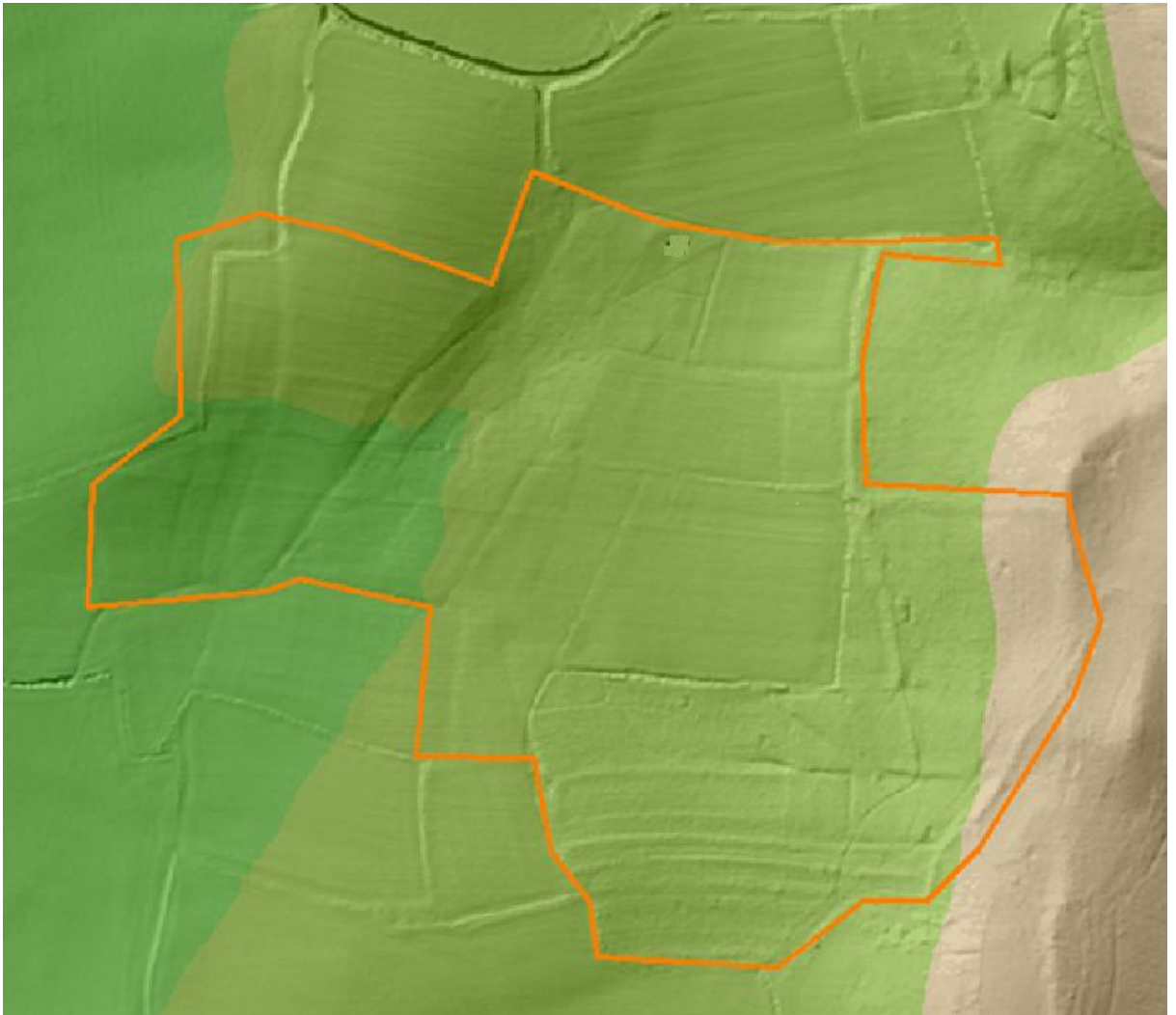
7. Sub-angular enclosure within woodland at Brilley.



The monument is not dated. It is formed from a combination of bank and ditch with one side (south /west) being formed by a streamline. A small entrance is

present in the southwest edge. The precise date is unknown; it could be prehistoric although it could equally represent a medieval Hafod / summer farming enclosure. These were used seasonally as part of a 'transhumance' system where animals were driven into the hills in the summer to feed and were looked after by shepherds and their families.

8. Medieval field system at Woolhope.



A later medieval field system near Woolhope showing a series of smaller paddocks containing ridge and furrow cultivation, lynchet banks (earthworks formed by ploughing over years of cultivation), headlands and trackways. These small paddocks over time have been amalgamated into larger fields but the earthwork remain well defined. Of the earthworks identified within the project more than 80% of them relate to the medieval period and are associated with field systems or their associated parts.

9. Water Meadows at Letton.

These series of small paddocks form a coherent water meadow system. Water meadows represent a method of pasture farming that involves periodic flooding of low-lying land through a system of dug channels, ditches and sluices. This both fertilises the ground at the same time as protecting it from early frosts and encouraging very early grass growth. These meadows were once extremely common in Herefordshire although they have been left to silt up or have been lost through more modern, less labour-intensive farming techniques.

This example uses the stream 'Letton Lake' to feed and drain these small paddocks. Within each paddock are a series of ridge and furrow that are bounded by drainage ditches. Cutting

through these meadows is the Hereford – Hay – Brecon railway line built in the 1860s and closed in 1964.



This water meadow is one of sixteen new examples identified through the project. The restoration and maintenance of water meadows have significant potential to lessen the impact of flooding, holding and containing water higher in the catchment during heavy rain and flooding events and the releasing it slowly afterwards.

10. Orchard Ridging at Stretton Sugwas.



Orchards and cider production were, and still are, a core rural industry for Herefordshire. The archaeology of these orchards is present across the county even when the trees are lost. An example of this can be seen at Stretton Sugwas where the small paddocks which contained lines of trees on raised ridges (not unlike medieval field systems) are present. These paddocks have been amalgamated together over time to form

larger fields. The nature of the ridges in most orchards is both straighter and narrower than medieval ridge and furrow cultivation although in some areas of the study the two coincide.

8 Conclusions and potential for future work

- 8.1 Project K reviewed approximately 20% of the county's landmass. In doing so it significantly expanded the archaeological knowledge base, increasing SHINE record coverage by 93% (429 new SHINE records were created). 467 existing Monument records were enhanced, and a further 270 new Monument records were created. In doing so, new and important sites, some of which would be classed of regional or national importance, were identified.
- 8.2 The project created and used an integrated methodology combining HER data with LiDAR, aerial/satellite imagery, and historic mapping that proved highly effective in identifying previously unrecognised archaeological features.
- 8.3 This report evidences the value and importance of undertaking this form of intensive archaeological work to better define, understand and most importantly protect the archaeological resource for future generations.
- 8.4 This project has shown the threat posed by piecemeal landscape improvements that have resulted in harm and loss of the finite archaeological resource. This change has happened without being noticed but cumulatively has changed the landscape in the last 30 years. The study identified specific patterns of heritage vulnerability, with medieval cultivation features (ridge and furrow, strip fields, lynchets) and non-designated agricultural buildings being particularly susceptible to erosion through modern farming practices. This targeted understanding will enable more focused protection strategies to be considered in the future.
- 8.5 The work of the Herefordshire HER will enable both the Forestry Commission to better administer future targeted tree planting initiatives and support wider council priorities for Nature Recovery, Climate Change Response, and Natural Flood Management by ensuring a more cohesive, evidence-based approach to landscape management decisions.
- 8.6 Project K has also highlighted the role of modern technology in finding and documenting new sites. The potential of using freely available Environment Agency LiDAR and satellite imagery to identify and characterise new sites is significant. When these 'remote' sources of information are combined with the rich evidence base contained within the county's HER it creates huge potential to understand our shared history.
- 8.7 The work has both standardised approaches to creating and managing SHINE data within the county, and highlighted the threat posed by piecemeal landscape improvements that have cumulatively transformed the landscape over the past 30 years without archaeological oversight.
- 8.8 The project also highlighted that Herefordshire HER's core agricultural heritage dataset needs revision and proactive curation. This is especially true given its key functional use within Nature Recovery and ELMs projects. The HER's work forms an important measure to advance arguments for better and more sustainable central funding to ensure the data is of both the highest quality and accuracy. It is clear that the current funding system for managing the data is under-resourced. Without a clear national strategy for future resource investment then decisions may be made that do not support the archaeology or the rural community.
- 8.9 The potential for future discoveries of new archaeological site and monuments using this methodological framework is high.

9 Acknowledgements

The authors would like to extend our thanks to:

- Tom Sunley, Forestry Commission. Tom co-ordinated and supported both us as a team as well as the wider project throughout the past 15 months. Most valuable have been the monthly workshop meetings drawing together a national cohort of local historic environment services to enable a much deeper and more nuanced understanding of both the wider techniques of the project but also the philosophy and methodology of creating a single national SHINE dataset. Through his co-ordination he has created a model for such future national projects for which we are very grateful for.
- Steve Bell, Hoople / Herefordshire Council GIS lead. Steve throughout the project engaged proactively to support the team and help deliver both the GIS technology and also reporting framework.
- The Built and Natural Environment Team, Herefordshire Council. Unlike many local authorities in Herefordshire the HER is uniquely placed within a specialist team of both natural and built environment specialists. This meant that input on Natural Landscape, Ecology and Natural Recovery opportunities were built into the project from the very beginning. This project will therefore have immediate local impacts greater than those envisaged by the Forestry Commission – with the results and opportunities that this work has created being built directly into the Nature Recovery Strategy for the county.

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<https://webarchive.nationalarchives.gov.uk/ukgwa/20130402170324/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf> [accessed 1/5/2025]

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https://historicengland.org.uk/research/results/reports/6831/TheMarchesUplandsMappingProject_AreportfortheNationalMappingProgramme [accessed 1/5/2025]

11 Appendix:

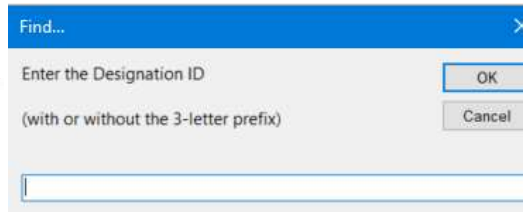
SHINE Workflow and Template Guidance for IDOX HBSMR

Standardised Exemplar SHINE record for IDOX HBSMR

SHINE – Standardised Guidance on Naming- Forestry Commission

DHE Number:

Double click on this to search for number you want



Find...

Enter the Designation ID

(with or without the 3-letter prefix)

OK Cancel

SHINE PROCESS FOR PROJECT K

Name / Title:

is the same as the Monument records

Authority:

Herefordshire Archaeology

General Tab:

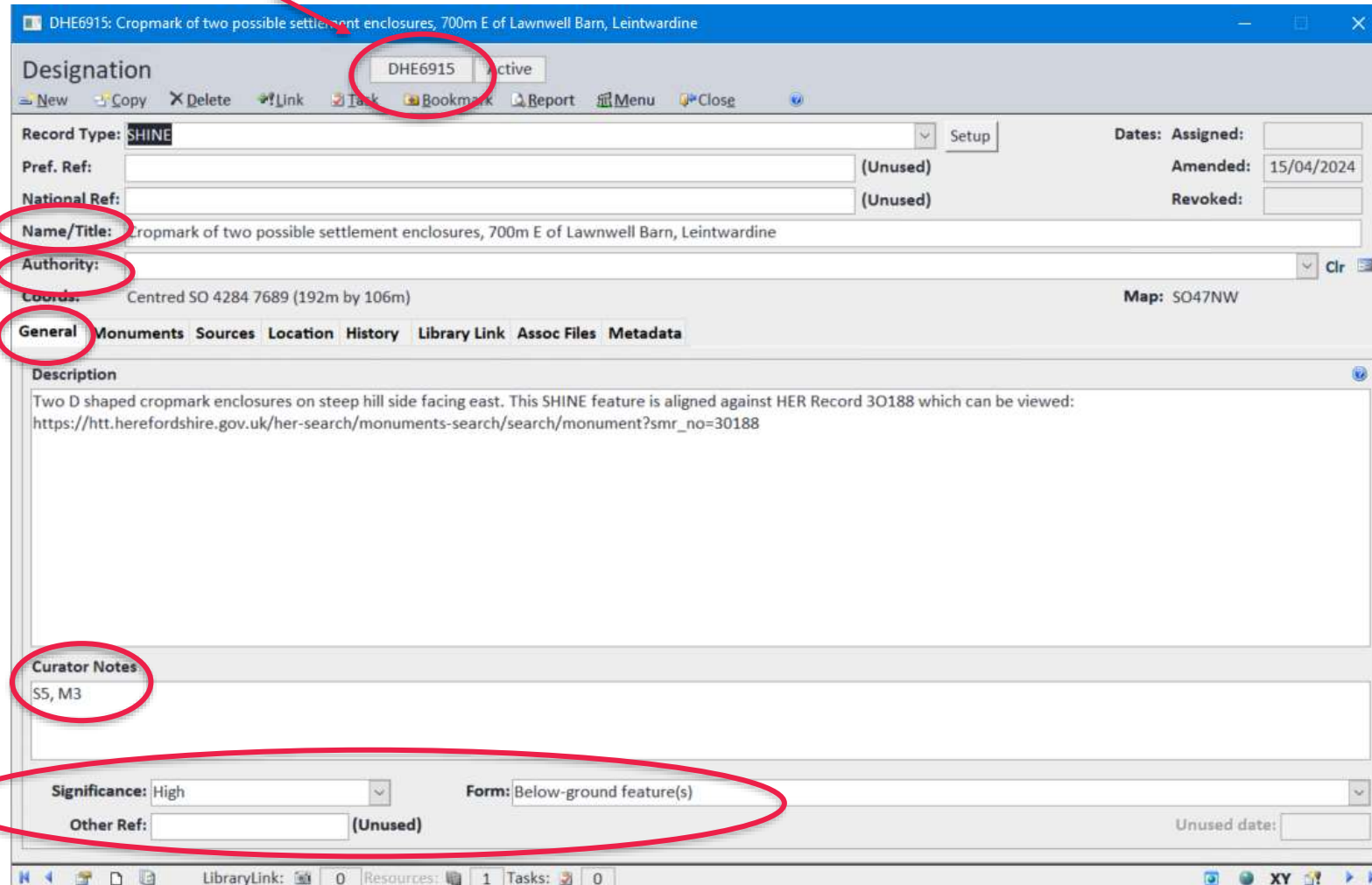
Main area for important things about the SHINE record

Curators notes:

Leave as they are

Significance / Form:

Leave or change as you think



DHE6915: Cropmark of two possible settlement enclosures, 700m E of Lawnwell Barn, Leintwardine

Designation

DHE6915 Active

Record Type: SHINE

Pref. Ref: (Unused)

National Ref: (Unused)

Name/Title: Cropmark of two possible settlement enclosures, 700m E of Lawnwell Barn, Leintwardine

Authority: Herefordshire Archaeology

Coords: Centred SO 4284 7689 (192m by 106m)

Map: SO47NW

General Monuments Sources Location History Library Link Assoc Files Metadata

Description

Two D shaped cropmark enclosures on steep hill side facing east. This SHINE feature is aligned against HER Record 30188 which can be viewed: https://htt.herefordshire.gov.uk/her-search/monuments-search/search/monument?smr_no=30188

Curator Notes

S5, M3

Significance: High

Form: Below-ground feature(s)

Other Ref: (Unused)

Unused date:

GENERAL: Description:

General Monuments Sources Location History Library Link Assoc Files Metadata

Description

Two D shaped cropmark enclosures on steep hill side facing east. This SHINE feature is aligned against HER Record 30188 which can be viewed:
https://htt.herefordshire.gov.uk/her-search/monuments-search/search/monument?smr_no=30188

Curator Notes

This should be short summary of SHINE feature / features.

Then sentence: **This SHINE feature is aligned against HER Record XXXXX (insert SMR number) which can be viewed:** add URL to Herefordshire through time. If more than one record pick either the most appropriate or add multiple URLs (within reason)

ASSOC FILES:

General Monuments Sources Location History Library Link **Assoc Files** Metadata

ID	Associated Resource	Type
44623	https://htt.herefordshire.gov.uk/her-search/monuments-search/search/monument?smr_no=30188	HTT Web URL
(New)	Aligned against principal HER record	

Type

- HTT Web URL
- Document
- Image
- Source URL
- Unpublishable URL
- Web page

Publish? ☐

1. Add URL to blank top line
2. Select source HTT Web URL from drop down – check publish box
3. Add note: **SHINE feature aligned against principal HER record**

The screenshot displays the SHINE application interface. At the top, the 'Monuments' tab is selected. Below it, the 'Associated Monuments' table lists a monument with ID 30188. A red circle highlights the 'Get from GIS' button in the top right corner. A red arrow points from this button to a text box that says 'Click this box to open the linked monument'. Another red arrow points from the 'Get from GIS' button to a text box that says 'Click this box to index monuments within polygon'. A red circle highlights the 'OK' button in the 'HBSMR v6' dialog box. A red circle highlights the 'SMR No. 30188' field in the 'Monument' form. A red circle highlights the 'Assoc Files' tab in the 'Monument' form. A red circle highlights the URL 'http://htt.herefordshire.gov.uk/her-search/monuments-search/search/monument?smr_no=30188' in the 'Associated Resource' table.

General **Monuments** Sources Location History Library Link Assoc Files Metadata

Associated Monuments

ID	Record Type	Name
30188	Monument	Cropmarks of two D shaped enclosures,710m NE of Lawnwell Barn, Leintwardine

Two D shaped cropmark enclosures on steep hill side facing east. The enclosures are approx the same size and shape and are in close proximity to each other. (1)

HBSMR v6

1 Monuments found in GIS

OK

Click this box to index monuments within polygon

Click this box to open the linked monument

30188: Cropmarks of two D shaped enclosures,710m NE of Lawnwell Barn, Leintwardine

Monument

MHE9020

New Copy Delete Link Task Bookmark Report Menu Close

Record Type: Monument (MON)

SMR No. 30188 Search:

Name: Cropmarks of two D shaped enclosures,710m NE of Lawnwell Barn, Leintwardine

Summary:

Click Assoc Files and copy URL from here to add to General description for the SHINE feature & SHINE Assoc Files Tab

Coords: Centred SO 42 76 (192m by 106m) Map: SO47NW Scientific Dating: Add

Location Tree Status & Codes Land Class Contacts Scores Description HLC Library Link **Assoc Files** Metadata Monitoring

ID	Associated Resource	Type
28120	http://htt.herefordshire.gov.uk/her-search/monuments-search/search/monument?smr_no=30188	HTT Web URL
	Link to Herefordshire Through Time Web Database	
	(New)	

LibraryLink: 0 Resources: 1 Tasks: 0

Click this box to open the linked monument

SMR No. 30188

Centred SO 42 76 (192m by 106m)

Scientific Dating: [Add](#)

Assoc Files

Associated Resource

Type

http://htt.herefordshire.gov.uk/her-search/monuments-search/search/monument?smr_no=30188

HTT Web URL

Herefordshire Through Time Web Database

Publish?

Publish2

LibraryLink: 0Resources:

Tasks:  0

X

SOURCES

ID	Specific Reference
SHE13684	Aerial Photograph: Musson, C R, 24/07/1996, 96-MB-0341. Chris Musson AP collection
SHE26128	Fieldwork archive: Herefordshire Archaeology, Desk based review of Forestry Commission Low Sensitivity Areas for afforestation / woodland creation

Sources:

These are sometimes copied across from the principal HER record – to find these open Monument record as above then click Descript button.

Sources + description open and you can copy the relevant Source (SHEXXX) across if you want to add

Do Add Source for Project K:

SHE26128

Amended: 15/04/2024

SMR No. 30188

Description

Two D shaped cropmark enclosures on steep hill side facing east. The enclosures are approx the same size and shape and are in close proximity to each other. (1)

NRHE

The following feature was mapped from good quality air photographs:-

Probable enclosure of unknown date, seen as cropmarks. Morphological description: an incomplete, asymmetric, polygonal enclosure, 90m by 50m, defined by 1 ditch, with 4 sides and 1 slightly out-turned entrance is visible facing east. Centred at: SO 4289 7690 (Morph No. MU.205.2.1)

This description has been generated from the RCHME MORPH2 database. (2)

Sources

Source ID	Specific ref	No	Compiled by	Date compiled
SHE13684	Aerial Photograph: Musson, C R, 24/07/1996, 96-MB-0341. Chris Musson AP collection	1	Simon Mayes	23-Sep-23
SHE25031	18-OCT-1993/RCHME: Mar	2	Simon Mayes	23-Sep-23
*				

LOCATION

General Monuments Sources **Location** History Library Link Assoc Files Metadata

Administrative Areas and Postal Addresses

Area Type **1** Name **2**

Civil Parish
Historic Parish
Unitary Authority

1: Select Civil Parish From Dropdown
2: Type parish and auto fills

Area Type Name

Civil Parish leintwardine, HEREFORDSHIRE **2**

LIBRARY LINK and METADATA

Can be left blank

General Monuments Sources Location History **Library Link** **Metadata** Assoc Files

Description

Two D shaped cropmark enclosures on steep hill side facing east. This SHINE feature is aligned against HER Record 30188 which can be viewed:
https://htt.herefordshire.gov.uk/her-search/monuments-search/search/monument?smr_no=30188

HISTORY

General Monuments Sources Location **History** Library Link Assoc Files Metadata

Assignment

Date: Authority: Clr [icon] [icon] X

Description:

Source ID: Clr [icon] Specific Ref: [icon]

Details:

Amendments (1)

Date: 15/04/2024 Authority: Herefordshire Historic Environment Record Clr [icon] [icon] X

Description: Reviewed as part of the Forestry Commission Low Sensitivity Areas for afforestation / woodland creation

Source ID: SHE26128 Clr [icon] Specific Ref: [icon]

Details: Fieldwork archive: Herefordshire Archaeology, Desk based review of Forestry Commission Low Sensitivity Areas for afforestation / woodland creation

Revocation

Date: Authority: Clr [icon] [icon] X

Description:

Source ID: Clr [icon] Specific Ref: [icon]

Details:

Assignment

If blank copy in the date from the spreadsheet list for when assigned – this automatically copies to the front page
Fill in no other details

Amendments

Fill out in this order to avoid HBSMR thinking – if a pop up opens saying do you want to create a new source - click cancel

Source ID: Add Project Source: **SHE26128**

Date: Select today's date – these auto-copy to front page of record

Authority: Type either Herefordshire Archaeology or Herefordshire Historic Environment Record

Description: Type Reviewed as part of the Forestry Commission Low Sensitivity Areas for afforestation / woodland creation

Dates: Assigned: Amended: 15/04/2024 Revoked:

CHECK GIS

Click Globe which opens up MapLink highlighting polygon

Open MapInfo workspace separately and find the same polygon – then check it against LiDAR and air photos – most of these will remain the same – but if it looks like the polygon needs changing / making bigger / smaller then make a note and Peter will check.

If the SHINE feature is a cropmark then you might not see anything on LiDAR and mapping

If the SHINE feature is earthworks then LiDAR should show extent

DHE6915: Cropmark of two possible settlement enclosures, 700m E of Lawnwell Barn, Leintwardine

Designation DHE6915 Active

New Copy Delete Link Task Bookmark Report Menu Close

Record Type: SHINE Setup Dates: Assigned: Amended: 15/04/2024 Revoked:

Pref. Ref: (Unused)

National Ref: (Unused)

Name/Title: Cropmark of two possible settlement enclosures, 700m E of Lawnwell Barn, Leintwardine

Authority: Clr

Coords: Centred SO 4284 7689 (192m by 106m) Map: SO47NW

General Monuments Sources Location History Library Link Assoc Files Metadata

Description

Two D shaped cropmark enclosures on steep hill side facing east. This SHINE feature is aligned against HER Record 30188 which can be viewed: https://htt.herefordshire.gov.uk/her-search/monuments-search/search/monument?smr_no=30188

Curator Notes

SS, M3

Significance: High Form: Below-ground feature(s)

Other Ref: (Unused) Unused date:

LibraryLink: 0 Resources: 1 Tasks: 0



NOTES

If you want to make any notes on the record – i.e. notes about things you are unsure of or want Peter to check then these can be done by clicking the note box at the bottom of the form. This is best if there is something complicated that needs doing – but the best thing to do is to write the note onto the SHINE check list in a way that we can review together when needed

DHE6915: Cropmark of two possible settlement enclosures, 700m E of Lawnwell Barn, Leintwardine

Designation DHE6915 Active

New Copy Delete Link Task Bookmark Report Menu Close

Record Type: SHINE Setup Dates: Assigned: Amended: 15/04/2024 Revoked:

Pref. Ref: (Unused)

National Ref: (Unused)

Name/Title: Cropmark of two possible settlement enclosures, 700m E of Lawnwell Barn, Leintwardine

Authority: Clr

Coords: Centred SO 4284 7689 (192m by 106m) Map: SO47NW

General Monuments Sources Location History Library Link Assoc Files Metadata

Description

Two D shaped cropmark enclosures on steep hill side facing east. This SHINE feature is aligned against HER Record 30188 which can be viewed: https://htt.herefordshire.gov.uk/her-search/monuments-search/search/monument?smr_no=30188

Curator Notes

SS, M3

Significance: High Form: Below-ground feature(s)

Other Ref: (Unused) Unused date:

LibraryLink: 0 Resources: 1 Tasks: 0

DesigUID: DHE6915 **Type:** SHINE **Status:** Active
Unused **Unused** **Unused**

Name: Cropmark of two possible settlement enclosures, 700m E of Lawnwell Barn, Leintwardine
Grade: **Assigned:** **Amended:** 15/04/2024 **Revoked:**

Legal Description

Two D shaped cropmark enclosures on steep hill side facing east. This SHINE feature is aligned against HER Record 30188 which can be viewed: https://htt.herefordshire.gov.uk/her-search/monuments-search/search/monument?smr_no=30188

Curatorial Notes

S5, M3

Designating Organisation:

Location

Grid Reference: Centred SO 4284 7689 (192m by 106m)
Map sheet: SO47NW **Area (Ha):** 10,857.36

Administrative Areas

Civil Parish LEINTWARDINE, HEREFORDSHIRE

Postal Addresses - None recorded

Designation History

Amendment (1)

15/04/2024 Reviewed as part of the Forestry Commission Low Sensitivity Areas for afforestation / woodland creation. Herefordshire Historic Environment Record. Fieldwork archive: Herefordshire Archaeology. Desk based review of Forestry Commission Low Sensitivity Areas for afforestation / woodland creation.

Sources

Aerial Photograph: Musson, C R. 24/07/1996. 96-MB-0341. Chris Musson AP collection. Oblique.

Associated Monuments

30188 Monument: Cropmarks of two D shaped enclosures, 710m NE of Lawnwell Barn, Leintwardine

Additional Information

Significance: High
Form: Below-ground feature(s)

What's in a Name? <i>Creating consistency in completing the 'Name' field.</i>	Do	Don't
• Provide <u>simple</u> information on 'what' and 'where'.	• Consider your audience: SHINE is aimed at farmers and land agents. They will have very little archaeological knowledge, so the writing style needs to be tailored for them. • Keep it short but informative. • Include any nomenclature or locational information associated with the site e.g. 'Earthwork burial mound known as Swale's Hill' or 'Earthwork remains of ridge and furrow, adjacent to Church Farm'.	• Don't use the 'name' field to provide an explanation of what the feature is. • Don't repeat information that occurs in the other fields (e.g. 'An above ground structure...'.. 'A barrow of high significance.... ') • Don't use acronyms that are unknown outside the world of archaeology – this includes: DMV, AP, RB, IA, R&F • Don't use complex terms including words like 'extant' • Don't use CAPITALs in the Name field. • Don't include your PRN somewhere in the text • Don't try and explain how you know about the site – e.g. Bronze Age barrow, An extant barrow listed by Warner is visible as a crop mark mound on air photographs. • Don't seem uncertain - Using too many 'probable' or 'possible' phrases or ?question marks. This suggests you aren't sure of your record, and the site might well not be suitable for inclusion in SHINE.