

RECENT AERIAL SURVEYS IN LANCASHIRE

Joel Goodchild

The history of aerial reconnaissance dates back to the nineteenth century but its development was accelerated by the First and Second World Wars with advances in camera and aircraft technology. O G S Crawford, the first Archaeological Officer of the Ordnance Survey, pioneered the application of aerial photography for use in archaeology, undertaking programmes of aerial reconnaissance across south-east England. Following the Second World War, aerial survey for archaeology expanded greatly when J K St Joseph created the Cambridge University Collection Aerial Photography (CUCAP), the first such collection in the country. In 1965 the Air Photographs Unit was established within the Royal Commission on the Historic Monuments of England, with a national reconnaissance remit. The RCHME's aerial survey unit transferred first to English Heritage in 1998 before becoming part of Historic England (HE) in 2015, tasked with a national reconnaissance programme, aerial mapping projects and the provision of guidance and training.

“The Lower Lune, Lower Wyre and Lower Ribble Environs, Lancashire, Aerial Investigation and Mapping Project” was carried out between March 2017 and July 2018 by Archaeological Research Services Ltd (ARS Ltd) on behalf of Historic England. Archaeological features visible in aerial imagery including historic aerial photographs and LiDAR data were mapped and recorded across three separate areas. The project was completed to HE standards and it was funded by HE through the National Heritage Protection Commissions Programme (NHPCP).

The survey covered a total of 206 Ordnance Survey kilometre grid squares in three blocks across areas that had not previously been the subject of aerial reconnaissance (Figure 1). These encompassed the uplands to the north-east of Lancaster, extending down through the lowlands surrounding Morecambe Bay toward Middleton (65sq km); the coastal plain including the fringes of Blackpool between the Wyre and Ribble estuaries (61sq km); and the river valleys surrounding Preston (80sq km). These areas were chosen because of their archaeological significance and the risks posed by proposed developments. The main products of the project were digital transcriptions of the form and extent of archaeological features seen on aerial images with supporting descriptions in the National Record of the Historic Environment (NRHE). These are available from the Historic England Archive and were supplied to the Historic Environment Record (HER). Monument records are available online via the Pastscape website (<http://pastscape.org.uk/>).

A brief summary of the findings of the project will be provided here. A more in-depth discussion of these findings and their significance can be found in the project report (report number 14/2019; available at <https://research.historicengland.org.uk/>).

Block 1 – Lower Lune Valley to Middleton

Sites relating to the later-prehistoric/Roman period were well represented in Block 1. Three features interpreted as Bronze Age cairns were identified to the south-west of Borwick, as well as a number of ditched enclosures including a probable Iron Age/Roman settlement. A number of possible Bronze Age barrows were mapped, four of which were identified to the immediate east of Over Head Quarry south of Capernwray. Three curvilinear enclosures of later prehistoric/Roman date were identified within the block. A probable Iron Age/Roman settlement was identified as curvilinear enclosures and pits at Kellet Lane Bridge. A rectilinear enclosure with internal subdivisions and a potential roundhouse is extant on the latest vertical aerial photography in the vicinity of Lancaster Business Park. A pair of banked and ditched rectilinear enclosures, along with

other affiliated boundaries, a pit, and a potential building or pen were identified near Cottam Farm, Nether Kellet.

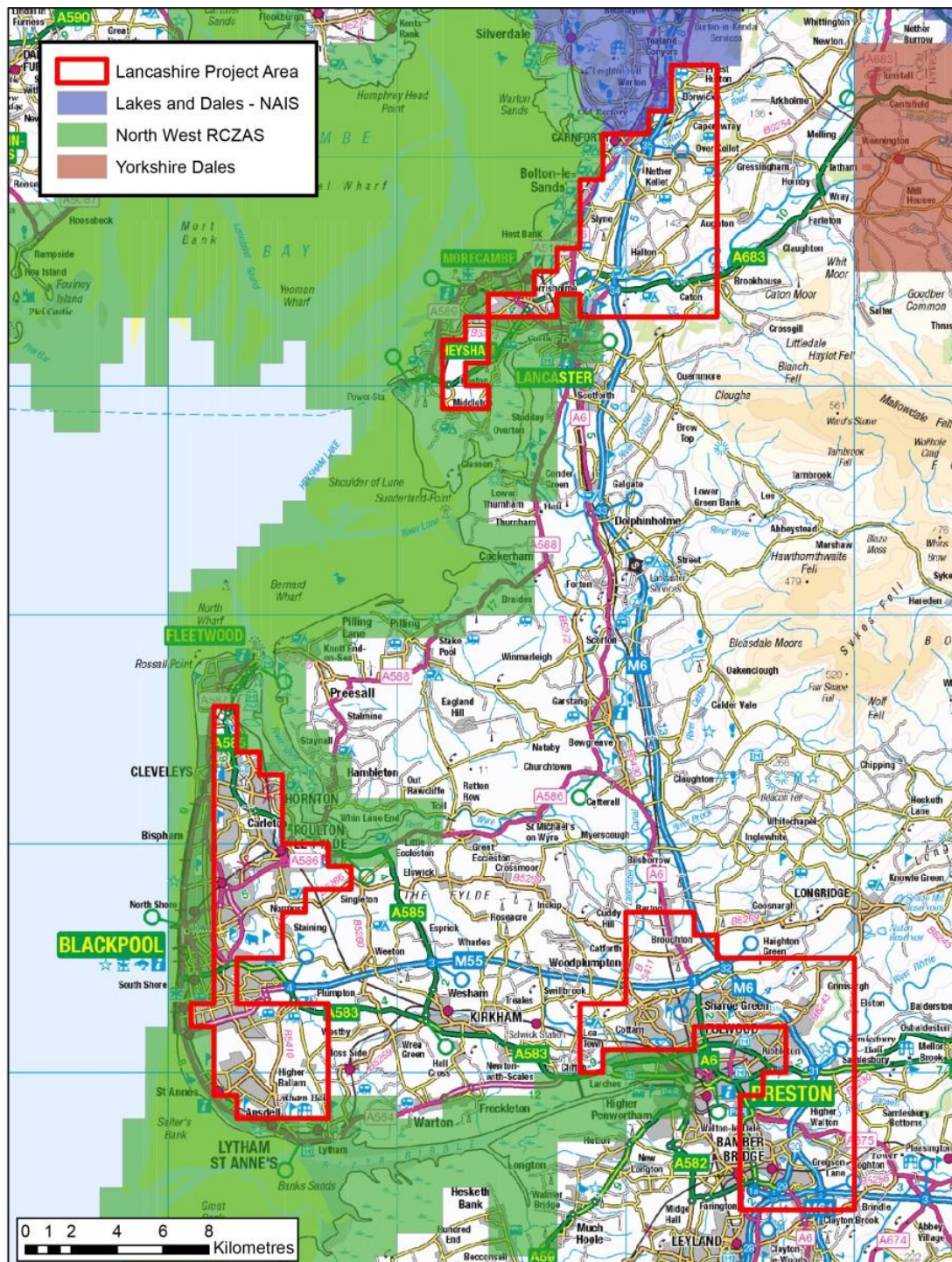


Figure 1: The Lower Lune, Lower Wyre and Lower Ribble environs, Lancashire, Aerial Investigation and Mapping Project areas and previous AI&M projects. © Crown Copyright and database right 2018. All rights reserved. Ordnance Survey Licence number 100019088.

An irregular ditched enclosure with internal earthworks is located between the coast and Bolton-le-Sands and may represent a medieval moated site. Extensive networks of medieval/post-medieval hollow ways and trackways can be found in the area between Nether Kellet, Aughton and Halton. Two substantial earthwork mounds are interpreted as refuge mounds on the floodplain of the River Lune. Significant military features include an extensive Second World War military camp and

adjacent army training areas at Quernmore Park, with a military depot and post-war vehicular and equipment dispersal area located adjacent. Halton Training Camp is visible on 1950s and 1960s photography as an extensive Cold War-period military camp on the northern bank of the River Lune north-east of Lancaster.

Block 2 –Wyre Estuary and Fylde Coast

Archaeological features pre-dating the Second World War consist of earthworks relating to a medieval moated site at Peel (near Higher Ballam) and a possible medieval field system and boundary earthwork in the grounds of Lytham Hall. The significance of these features stems from their being the only surviving features of probable medieval date in the block. Most features identified date from the Second World War, the most prevalent being air-raid shelters concentrated in Blackpool and the surrounding towns. Structures relating to a number of military camps, searchlight batteries, a heavy anti-aircraft battery and two airfields were identified and mapped within the block. These include structures and earthworks at RAF Stanley Park, formerly Stanley Park Aerodrome, a significant site in terms of the history of early flying that has now been incorporated into Blackpool Zoo. RAF Squire's Gate, now Blackpool Airport, is also significant as one of the main production sites of the Wellington Bomber during the Second World War. Taken as a whole, mapping these structures provides a valuable insight into how Blackpool's contribution to the war effort was structured.

Block 3 – Lower Ribble valley

Monuments mapped within the block span from the Late Prehistoric/Roman period through to the Cold War. The earliest significant feature present within the block consists of earthworks relating to the Ribchester-Kirkham Roman road. The road is significant in that it was likely established shortly after Agricola's advance through Lancashire in the years following AD71 and would have played a key strategic role in the conquest of the region. A number of features belonging to the medieval period were identified within the block. These mostly relate to the high-status manorial sites that were peppered across the landscape during this period. Significant features identified include probable garden features in the grounds of Cottam Hall, Preston, a previously unidentified second rectilinear moat at Broughton Tower, as well as earthworks relating to a deserted medieval settlement and moated site in the east of the parish of Grimsargh. Three possible livestock enclosures were identified across the block, emphasising the importance of pastoral agriculture in the medieval/post-medieval period, prior to the enclosure of the common grazing lands that surrounded Preston from the sixteenth century. Perhaps the most significant features discovered in the block are earthworks constituting a formal garden, including paths, ponds and prospect mounds within the grounds of Walton Hall. These features, visible in LiDAR images, are remarkably well preserved. The only Second World War site of significance is the Royal Air Force Station, RAF Barton Hall, which served as the operations centre for No. 9 Group RAF, controlling fighter operations over North-West England and Northern Ireland. Elements of the station were later incorporated into Longley Lane Sector Operations Centre which continued to coordinate fighter operations and interception into the Cold War, before closing in 1957.

Author Profile

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