

'Brecks from Above': Using Aerial Photographs for Archaeology

By: Norfolk Historic Environment Service

Sources of Aerial Photographs

The main aerial photographic sources utilised by the Norfolk Air Photo Interpretation Team are summarised below. The list is not exhaustive.

- **Norfolk Air Photo Library (NAPL):** The Norfolk Air Photo Library is a collection of some 100,000 aerial photographs, almost all of Norfolk. It is a primary resource for any air photo interpretation work undertaken in Norfolk.
- The library is curated as part of the Norfolk Historic Environment Record (NHER). Enquiries about using the aerial photographs, *etc.*, should be directed to the NHER (heritage@norfolk.gov.uk).
- The principal components of the collection are as follows:
 - The core of the collection is some 40,000 **Norfolk Archaeological Unit / Norfolk Landscape Archaeology photographs**. These are specialist oblique aerial photographs, for the most part of archaeological sites, taken by Derek Edwards between 1974 and 2000. They mainly consist of black and white prints, but also include colour slides and large-format transparencies.
 - A significant number of copy prints of photographs belonging to the **Cambridge University Committee for Aerial Photography** are included in the collection. These are principally black and white prints of archaeological sites in Norfolk, but there are also a few vertical prints.
 - The NAPL holds a near-complete set of the c. 1945–7 vertical survey of the country by the **RAF** (the National Air Survey). The prints can be consulted by appointment (via the NHER). A seamless digital layer derived from the prints is available on the Norfolk Map Explorer (<http://www.historic-maps.norfolk.gov.uk/>). Any gaps in coverage can usually be filled by consulting the collection held by the Historic England Archive (HEA, see below).
 - The collection also holds the **RAF 'Floodlight'** series of oblique and vertical photography taken after the floods of 1953. For the most part these cover the coast, although some lower-lying areas further inland are also covered.
 - The **RAF** also undertook some oblique surveys in 1947–50 of King's Lynn, Norwich and parts of the coast. There are also occasional holdings of individual vertical prints, or short runs of verticals, for specific areas.



- The library includes a considerable number of **Ordnance Survey** (OS) vertical photographs, for the most part taken between the 1960s and 1990s. The HEA (see below) holds many of the same photographs, but also additional ones; conversely, the NAPL holds a small proportion of OS prints that are not held by the HEA.
 - The OS photographs are held in two different print formats, large and small. Usually prints are held in only one format, but occasionally both are available (again, the HEA may be able to supply small-format prints, where the NAPL only has large). The large-format photos are difficult to use, as they are very large and heavy, require a specialist stereoscope to view in stereo, are awkward to map from due to their size, and difficult to scan. Occasionally additional OS verticals occur elsewhere within the collection
 - A relatively recent addition to the library has been **BKS** colour vertical photographs of the whole of Norfolk, mainly taken in 1988 and formerly held by the Planning and Transportation Department. The prints can be viewed as part of the collection, by appointment with the NHER, but it is also possible to view them as a digital layer on the Norfolk Map Explorer website (<http://www.historic-maps.norfolk.gov.uk/>).
 - The library includes a collection of **Meridian Airmaps Limited** photographs, mostly low-level black and white vertical photography dating from the 1960s and taken along the route of road schemes.
 - The library also holds several historic collections of oblique aerial photographs, many of which date from the early 20th century. They include the photographs of **George Swain**, for example, and those of **Frederick Low**. Although often of little archaeological interest, they can provide a useful 'check' for the presence/absence of Second World War military sites, for example. They also include nice 'social history' images (early images of amusement parks, holiday camps, *etc.*). Some of these collections can be viewed on the Picture Norfolk website (<https://www.norfolk.gov.uk/libraries-local-history-and-archives/photo-collections/picture-norfolk>).
- **Suffolk County Council:** Suffolk County Council Archaeological Service Conservation Team hold a small (relative to Norfolk) collection of archaeological aerial photographs. They are curated by the Suffolk HER (see 'Further Resources' for contact details). Non-specialist, vertical photographs of the county are held by Suffolk Record Office.
 - **The Historic England Archive (HEA, Swindon):** The HEA holds a huge national collection of aerial photographs, some of which are duplicated in the Norfolk Air Photo Library. The collection includes some very early photography and photos taken very recently (Historic England still undertakes aerial reconnaissance). The Air Photo Interpretation Team uses this collection for all its large projects. Enquiries about what the HEA holds, viewing photographs and/or obtaining copies can be made through their enquiry service <http://archive.historicengland.org.uk/>.
 - **Cambridge University Committee for Aerial Photography (CUCAP, Cambridge):** This collection includes the many archaeological aerial photographs taken by J.K. St Joseph. The library is currently closed. The catalogue and selected images can be browsed on its website

<http://www.cambridgeairphotos.com/>. A number of copy prints are held in other collections, including the Norfolk Air Photo Library, Suffolk HER, and the Historic England Archive.

- **Google Earth:** freely available imagery, this is now a standard source for most air photo interpretation projects. See separate guidance for more detailed information.
- **Bing Maps:** Bing Maps <https://www.bing.com/mapspreview> has two aerial photo layers. These sometimes replicate each other, or a layer on Google Earth; however, it is worth checking as it sometimes uses imagery not available elsewhere.
- The freelance photographer **Mike Page**, whose landscape shots appear frequently in the EDP and his own books, among other places, now has a website <http://www.mike-page.co.uk/>. A number of his photographs of archaeological sites have been accessioned in the Norfolk Air Photo Library.
- **Other Sources:** Depending on where you are focusing your research, other resources may be available. These may be held by individuals, local bodies such as parish or district councils, libraries and museums, or bodies such as the Forestry Commission or the Broads Authority.

