

ONLINE TRAINING RESOURCES

'Brecks from Above': Using Aerial Photographs for Archaeology

By: Norfolk Historic Environment Service

Further Resources

The following lists are not exhaustive, but are intended to provide a starting point for those wishing to pursue their own research or to learn more about the archaeological uses and interpretation of aerial photography and lidar.

Those interested in pursuing their own projects in the Brecks as part of the 'Breaking New Ground' scheme, are advised to contact Claire Bradshaw, the Community Archaeologist for Norfolk Historic Environment Service.

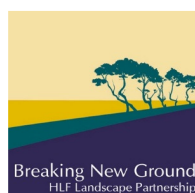
Claire Bradshaw
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For research undertaken outside the Brecks, or not as part of Breaking New Ground, please contact Claire Bradshaw for projects within Norfolk, or Suffolk County Council Archaeological Service Conservation Team for projects in Suffolk.

Tel: 01284 741230
Email: archaeology@suffolk.gov.uk

Further Information About Aerial Photographs and Lidar

- **Aerial Archaeology Research Group (AARG):**
<http://www.univie.ac.at/aarg/index.php/my-home.html>. Lots of useful information and links on their webpage, plus an annual conference, bi-annual newsletter (*AARGnews*) and occasional publications and events; you need to become a member to view the current issue of *AARGnews*, but older issues can be downloaded for free.
- Crutchley, S. and Crow, P., 2010. *The Light Fantastic: Using Airborne Laser Scanning in Archaeological Survey*, Historic England. Downloadable from <https://historicengland.org.uk/images-books/publications/light-fantastic/>



- Crutchley, S. and Small, F., 2016. *Rapid Desktop Reconnaissance: Trial Use of Lidar for Monument Recording*, Historic England. Downloadable from <http://research.historicengland.org.uk/Report.aspx?i=15437>.
- **Historic England:** The 'Research' section of their website has dedicated pages for airborne remote sensing, including aerial photography and lidar <https://historicengland.org.uk/research/approaches/research-methods/airborne-remote-sensing/>. The 'Research Results' section has pages for many of the air photo interpretation projects they have carried out or funded, including those in the East of England <https://historicengland.org.uk/research/research-results/recent-research-results/east-of-england/>. Reports on these projects, and more general publications, for example on the use of lidar, can be downloaded from the website for free.
- Connolly, D., *Beginners Guide to Aerial Survey and Rectification. Guide 7*. Downloadable from the British Archaeological Jobs Resource (BAJR) website <http://www.bajr.org/BAJRread/BAJRGuides.asp>.

Books

The AARG website also includes more up-to-date bibliographies and links to publications.

- Edwards, D., and Williamson, T., (2000). *Norfolk Country Houses from the Air*. Sutton Publishing, Stroud.
- Riley, D.N., 1987. *Air Photography and Archaeology*. Duckworth, London.
- Wade Martins, P. (ed.), photography principally by Edwards, D.A., 1997. *Norfolk from the Air 1*. Norfolk Museums Service.
- Wade Martins, P., with Everett, J. (eds), photography principally by Edwards, D.A., 1999. *Norfolk from the Air 2*. Norfolk Museums Service.
- **Wilson, D.R., 2000 (2nd ed.). *Air Photo Interpretation for Archaeologists*. Tempus, Stroud.** This is still the basic handbook for archaeological air photo interpretation.

Existing Records and Previous Work

It is **always** advisable to consult the local Historic Environment Record (HER) at the start of any new research project, as they may hold records for the area you are interested in, and information about any previous archaeological investigations that have taken place.

- **Norfolk HER:** Norfolk Historic Environment Service, Union House, Gressenhall, Dereham, Norfolk, NR20 4DR. Tel: 01362 869282. Email: heritage@norfolk.gov.uk. An abridged version of the Norfolk HER is available at <http://www.heritage.norfolk.gov.uk/>
- **Suffolk HER:** Suffolk Historic Environment Record, Bury Resource Centre, Hollow Road, Bury St Edmunds, IP32 7AY. Tel: 01284 741237 or 01284 741226. Email: archaeology.her@suffolk.gov.uk. An abridged version of the Suffolk HER is available at <https://heritage.suffolk.gov.uk/home>

- **Historic England:** Historic England maintain their own record of archaeological sites and investigations, the National Record of the Historic Environment (NRHE). This sometimes replicates the information held by the HERs, but sometimes includes records or additional information that the HERs don't have. An online version can be consulted at <http://www.pastscape.org.uk/>
- Historic England also maintain the National Heritage List for England (NHLE; <https://historicengland.org.uk/listing/>). This is a list of all designated sites, including Scheduled Monuments, registered parks and gardens, Listed Buildings, battlefields, and protected wreck sites.
- **Heritage Gateway:** This website allows you to cross-search both local (HER) and national (NRHE) datasets, but is not necessarily as detailed or up-to-date as the individual datasets it is derived from.

Maps

As well as basemaps for undertaking rectification and mapping, it is helpful to check historical maps for features that may equate to features visible on aerial photographs or lidar.

- **Ordnance Survey:** A selection of Ordnance Survey map data is available to download for free <https://www.ordnancesurvey.co.uk/business-and-government/products/opendata-products.html>
- **Norfolk Map Explorer:** This website enables viewing of a selection of historical maps (Ordnance Survey 1st edition, Tithe and Enclosure) across much of the county (coverage is not complete). It also has digital aerial photographic layers derived from the RAF National Air Survey of c. 1946, and the BKS survey of c. 1988. The original prints from both surveys are held by the Norfolk Air Photo Library.
- **Old Maps Online:** This website provides access to a large collection of historical maps. The range of historical Ordnance Survey maps available is particularly useful for air photo interpretation work <http://www.oldmapsonline.org/>
- Record offices also usually hold a good selection of historical maps.

