

The BAS software portfolio

Making an effective contribution to our local archaeology requires the use of both computer systems and teamwork. For this reason, over many years Andrew Hutt identified a portfolio of applications which have been used to support the Society's work. More recently, Tim Lloyd and Martin Labram have identified new applications to add to this portfolio. This paper explains the current portfolio.

Microsoft Office is the base of the portfolio. MS Word with a series of templates from the BAS Digital Archive enables us to produce official letters, the newsletter, posters for exhibitions, fieldwork proposals and reports and the Berkshire Archaeological Journal. Excel spreadsheets are used to collect research data and process results with a degree of traceability not so reachable to the less technical using programming languages. MS Access is currently the database which underpins the BAS Gazetteer to provide data storage in structured and searchable formats; this database design has been based on Historic England's MIDAS standards. MS PowerPoint is typically used to present project updates and results.

DraftSight is a computer aided design (CAD) application. It operates very like AutoCAD (an industry standard application for architecture and engineering). BAS will use it for creating dimensionally accurate site plans with information on multiple layers. These would include: existing buildings and landscape, survey grid, excavation trenches, archaeological features. Images from Snuffler can be imported and scaled to fit the grid. Plots can be printed directly or exported as pdf files. As line weight and text manipulation are difficult to achieve, plans will normally be imported into Affinity Designer to make them suitable for publication (see below).

Affinity Designer is a multi-layer vector drawing application. It is compatible with and operates very like Adobe Illustrator (an industry standard application for illustration). BAS will use it to mark up images from Snuffler and imported pdf files from DraftSight. The application allows line weights and colours to be manipulated and provides for the creation of coloured fields and text labels. Plans and diagrams for publication will normally be created in this application.

Affinity Photo is a multi-layer pixel drawing and photo editing application. It is compatible with and operates very like Adobe PhotoShop (an industry standard application for image creation and manipulation). BAS will use it when required to edit images for inclusion in publications or for import into other applications. It is not intended to be the only application for image editing as there are facilities in Microsoft Office which may be sufficient for many purposes.

QGIS is a well-known open-source Geographic Information System (GIS) which is free. This sophisticated and powerful software combined with also freely available Ordnance Survey, British Geological Society and OpenStreetMap background mapping allows us to draw accurate maps, positioning of our local archaeology against modern geography, terrain elevation, underlying geology and modern and historical administrative boundaries. BAS topological and geophysical surveys can be overlaid on Ordnance Survey mapping. QGIS also supports all sorts of spatial queries that can identify the enclosing element within the background mapping for sites extracted from the BAS Gazetteer database for instance.

Snuffler is an application is used to process data collected during resistivity and gradiometer surveys.

It is proposed that the BAS Study Group meeting on Wednesday 3rd January 2017 is devoted to learning about the portfolio. If you have a particular interest then please contact Andrew Hutt. To see if the software will run on your computer and to download a copy see the table below

Application	Down load from	Cost	Runs on PC	Runs on MAC
DraftSight	https://www.3ds.com/products-services/draftsight-cad-software/free-download/	Free	✓	✓
Affinity Designer	https://affinity.serif.com/en-gb/designer/	£48.99	✓	✓
Affinity Photo	https://affinity.serif.com/en-gb/photo/	£48.99	✓	✓
QGIS	http://www.qgis.org/en/site/	Free	✓	✓
Snuffler	http://www.sussexarch.org.uk/geophys/snuffler.html	Free	✓	

