How Qgis is helping me write a book

The Littleover Landscape: From Ice Age to Domesday

Tony Brookes, September 2023

With thanks to the Littleover History Group & the Derbyshire Archaeological Society for their support
The Book!

• Landscape Archaeology, covering 1,000,000 BC to 1087 AD

• The Littleover Area is a 7.5 mile radius around St Peter’s Church, map later

• Qgis used to create all the maps needed to tell the story of the landscape shown by the archaeological finds, Geology, Crop Marks, Parish Boundaries, and the Domesday Book

• Aimed at the Lay reader

Found in a back Garden in Mickleover, the next door parish to Littleover

Portable Antiquities Scheme, Annual Report 2004/5
Main Data Sources

• Derbyshire’s Historic Environment Record (H.E.R.) at Matlock who have supplied their data for my book (3 shapefiles & a 1200 page pdf) (about 450 items)

• The British Museum’s Portable Antiquities Scheme’s (P.A.S) data – approx. 420 items in the A.O.I.

• Other sources
  • Papers (mainly via Google as no academic account)
  • Books
  • Periodicals or Serials
  • Anything else relevant
  • ABEbooks & Oxbow Publishing
  • UK Data Service
  • Historic England – Some Shapefiles showing cropmarks, from the Aggregates Levy projects
  • Environment Agency - LIDAR
Open Source Software

• Qgis v 3.32. – 1 Lima
• Zotero (reference manager)
• Blender (maybe)

unlikely
Inkscape
Gimp
Open or Apache Office

Closed Source Software

(Needed to publish a book & prepare images for presentations & articles)

• Scrivener
• MS Office 365 (family) & Apple’s Numbers, Pages, Keynote
• Affinity Suite (Photo, Publisher, Designer all v2)
• Mac

• Websites
  • ColorBrewer
  • https://archaeologydataservice.ac.uk
  • Google, Youtube,
  • etc
The Littleover Area of Interest (AOI) Red circle, Data from the Ordnance Survey, & Derby City Council 2016 Ward boundaries (shown in green).


OS Open Zoomstack & Derby City 2016 boundary
Each point could be as small as a coin or as large as a Cursus. Cursuses are monumental Neolithic structures resembling ditches or trenches (Wikipedia).

All eras, and too many to make sense of!

Hashing marks - areas of archaeological interest, mainly cropmarks......
132 Parishes or part parishes, total area approx. 113,000 acres!
<table>
<thead>
<tr>
<th>Colour</th>
<th>Marine Isotope Sequence</th>
<th>Dates BC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>16</td>
<td>676,000</td>
</tr>
<tr>
<td>Grey</td>
<td>12</td>
<td>430,000 – 480,000</td>
</tr>
<tr>
<td>White</td>
<td>6</td>
<td>130,000 – 170,000</td>
</tr>
<tr>
<td>Reddish</td>
<td>4</td>
<td>71,000</td>
</tr>
<tr>
<td>Grey</td>
<td>Last Glacial Maximum</td>
<td>20,000</td>
</tr>
</tbody>
</table>


The Paper offers 3 reconstructions for each ice age, best estimate, maximum & minimum. Plotted here is the best estimate.
Map Series showing how Doggerland was slowly drowned as the sea level rose as the last Ice Age ended. Note – The black dots are human settlements, including those currently underwater.

The colonization of Ireland: A human ecology perspective Jesse W. Tune
Department of Anthropology, Fort Lewis College, 1000 Rim Dr., Durango, CO, 81301, USA

Quaternary Science Reviews 249 (2020) 106632

Modern North Sea

Production and Cost Assessment of Offshore Wind Power in the North Sea
To cite this article: J N Sørensen et al 2021 J. Phys.: Conf. Ser. 1934 012019
Data from https://www.gebco.net

N.B: All images on this slide are taken directly from the PDF’s referenced.
1st Attempt Place name

Derivations

Blue = OE elements inc Anglian

Red = some element of Old Norse
Brown lines - OS Terrain 50 Contours based data 2022 edition
Red Circle – Area of Interest
Green Line – Derby City 2016 Administrative Boundary
Red Line – 1851 Parish Boundary for Littleover
Paleolithic finds marked thus – y
Blue Line – Rivers & canals

**Spin Off Project in 2022**
An area around Littleover has also been laser cut into a 3D representation of Littleover (it was only a slightly scaled up somewhere between A4 & A3). It and some maps & text were exhibited at a Making Festival in Derby in 2022. Qgis used to create contour svg’s
Why Oh Why?

- Are Grid Refs always in a different format to the previous batch & often appear near Penzance..?
- Can I not get straight in my head the differences between the TLA’s for Lidar? [DEM/DSM/DTM]
- Are there so many closed source papers?
- Are there aways interesting new things popping up?
  - 1944 USAFE Aerial photos
- Can I have
  - A way of running a catalogue of the Qgis Projects and shapefiles used in the Project on my Mac not a distant server? (that I don’t have)...
  - A faster start-up of Qgis on my Mac?
- How does the H.E.R service use a system that supplies hidden map ref’s that QGIS plots but not displayed in the attributes table or CSV’s?
- Incredibly useful
  - University of Nottingham’s Community borrower scheme
  - Being a member of Local History/Archaeology Groups
  - Qgis user email list
  - Online tutorials and documentation (Qgis et al)
- Need to learn & then do in Qgis....
  - Lidar for the AOI
  - Viewshed analysis - how far are the barrows visible & where from?
  - Least cost routing between the Domesday book settlements – and earlier ones when I’ve plotted them separately
Any Questions
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