

**East Anglia Fenlands through Time**  
**May 2010 Metadata**  
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Darby (1969, 1974) describes the economic geography of East Anglia from the 1087 Domesday census, and the 1327-34 and the 1640-1641 Subsidy tax assessments. The switch of wealth from the Uplands in the north and south, to the Lowlands in the centre, is illustrated through 55 map figures. Some are re-created here as thematic maps, using Ordnance Survey OpenData released this month under a *creative commons attribution licence*, with no restriction to re-use derived data.

<u>Source</u>	<u>Name</u>	<u>Description</u>	<u>Comment</u>
O.S. Opendata		Shape files	same as April 2010
Boundary-Line	county_region	Counties	(S.Yorks. missing)
	district_borough_unitary_region	Boroughs	OSGB 36 British
	district_borough_unitary_ward_region	Wards	National Grid,
	high_water_polyline	Coast high-tide mark	EPSG:27700
	parish_region	Parishes	projection
Strategi Shape (GB_North, GB_South)	a_road_polyline	UK 'A' roads	WGS 84,
	b_road_polyline	UK 'B' roads	EPSG:4326
	coast_polyline	Coastline	Projection)
	foreshor_region	Coast tidal region	
	lakes_region	Lakes	
	land_use_polyline	Roman roads, dykes	
	motorway_polyline	UK motorways	
	nat_park_polyline	National Parks	
	railway_polyline	Railways	
	rivers_polyline	Rivers	
	settlmnt_point	Cities, towns, villages	
	urban_region	Cities, towns, villages	
woodland_region	Woodlands		

The following data make a vector map context. They were clipped to the four counties, except for the southernmost Yorkshire parishes, where county data was missing from OS Opendata.

<u>Source</u>	<u>Name</u>	<u>Origin</u>	<u>Comment</u>
Derived	EastAngliaARoads	A roads	clipped on
	EastAngliaBoroughs	Boroughs	Suffolk,
	EastAngliaBRoads	B roads	Norfolk,
	EastAngliaCities	Cities	Cambs.
	EastAngliaCoast N / S	Coastline	and Lincs.
	EastAngliaHighwater	Coastline	counties,
	EastAngliaCounties	Counties	and S. Yorks.
	EastAngliaForeshore	Foreshore	parishes
	EastAngliaLakes	Lakes	

EastAngliaMotorway	Motorways
EastAngliaNationPark	National Parks
EastAngliaParishes	Parishes
EastAngliaRailways	Railways
EastAngliaRivers	Rivers
EastAngliaRoman_Dyke	Land use
EastAngliaSettlements	Settlements
EastAngliaUrban	Urban
EastAngliaWards	Wards
EastAngliaWoodlands	Woodlands

From this were derived the following data. Parishes are the common areal unit in history publications. And Darby uses these two attributes as a measure of economic wealth: ploughteams in the Domesday data, and tax assessment in the Subsidy data. Two attributes were added to the Parishes, PloughTeam (number per 1000 acres) and Subsidy (assessment per 1000 acres).

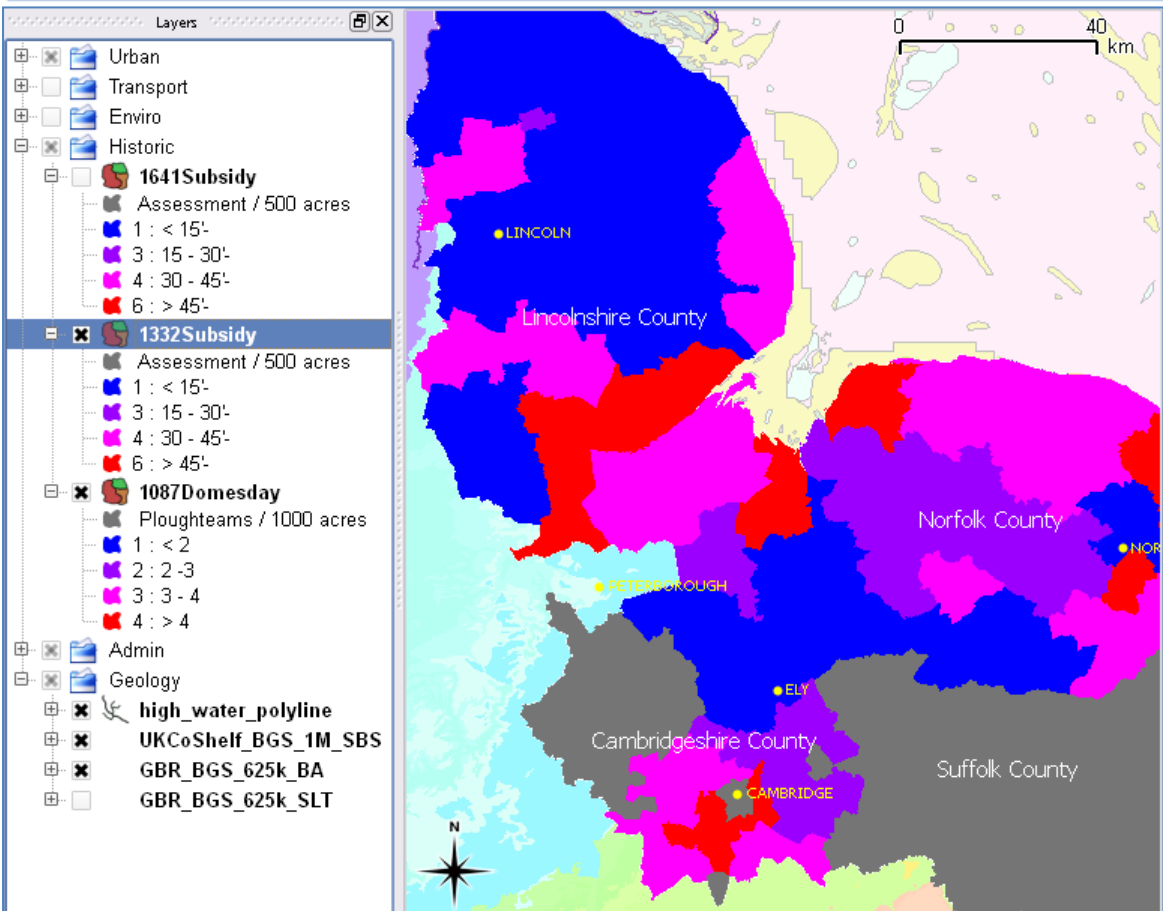
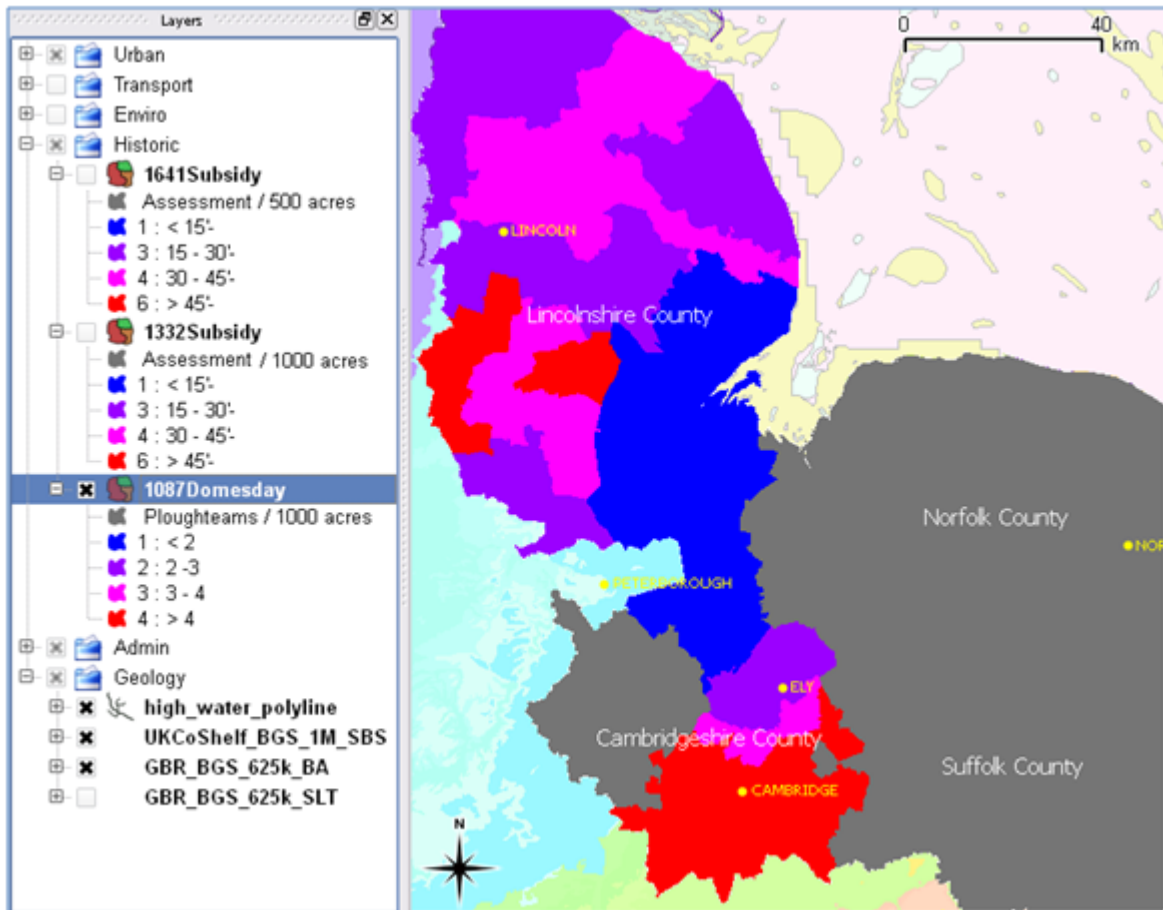
<u>Source</u>	<u>Name</u>	<u>Origin</u>	<u>New attribute</u>
Augmented	1086Domesday	East Anglia parishes	PloughTeam
(from Darby	1332Subsidy	East Anglia parishes	Subsidy
1969: figs. 5,	DrainSubsidy (1641)	East Anglia parishes	Subsidy
19 and 20,	MergeDomesday	incl. S. Yorks. Parishes	PloughTeam
and 1974:	MergeSubsidy	incl. S. Yorks. Parishes	Subsidy
figs. 4, 5,	SYorkDomesday	for missing county	PloughTeam
18, 20, 21,	SYorkSubsidy	for missing county	Subsidy
23 and 25)	CambsGeol (1794, 1813 land cover)	East Anglia parishes	SurfGeol
	CambsSurfGeolMap (1877)	geoTIFF	

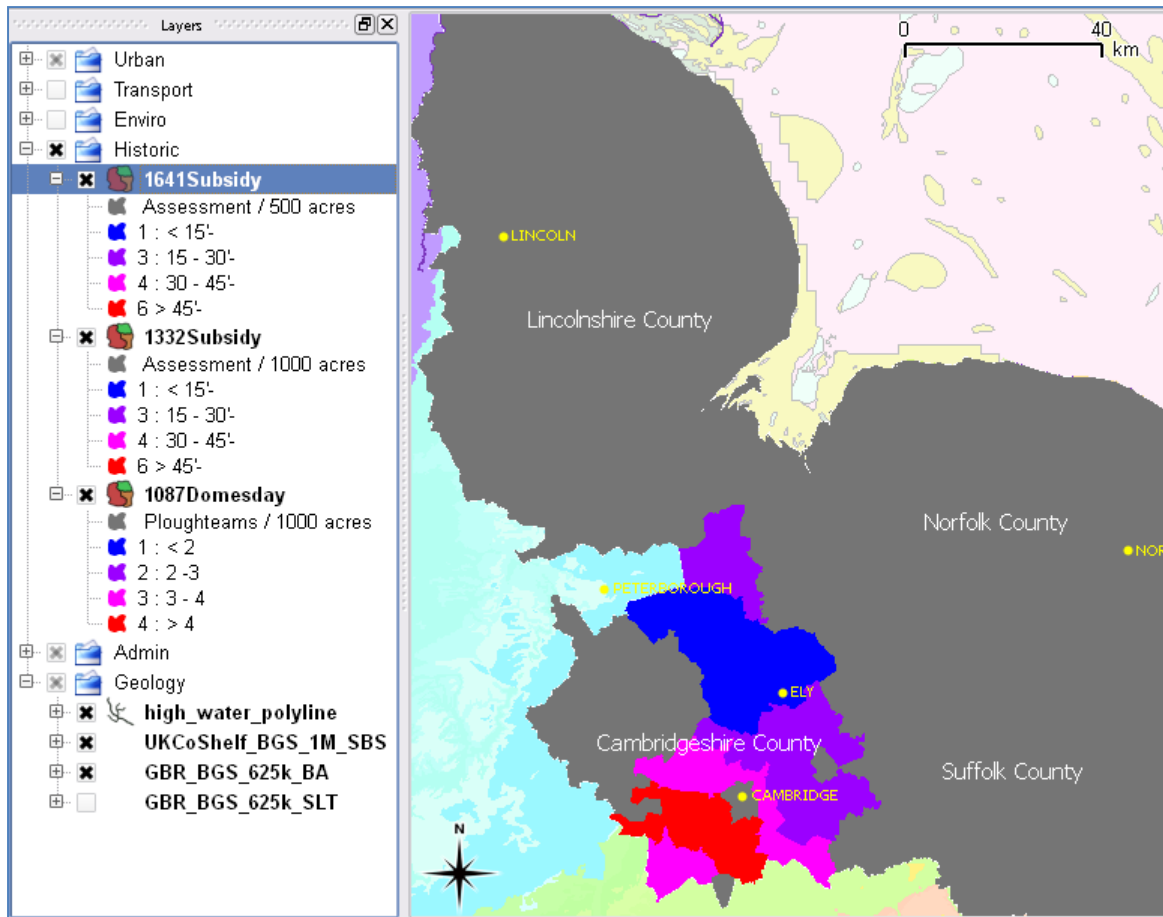
NGDC and BGS WMS data were added for a low res coastline, and surficial and bedrock geology onshore and offshore. Highlighted data are posted on GIS Cloud web service, see [blog.zolnai.ca](http://blog.zolnai.ca).

<u>Source</u>	<u>Name</u>	<u>Description</u>	<u>Comment</u>
NGDC	GSHHS Coastline	1:1M coastline vectors	download
BGS WMS	UKCoShelf_BGS_1M_SBS	Offshore 1:1M surficial raster	WMS 1.1
	GBR_BGS_625k_BA	Onshore 1:625K bedrock raster	WMS 1.1

Result images and legend notes are on the next pages. Here are the references. Data files, figures and metadata spreadsheet are available upon request, and this will be served up on the internet.

<a href="http://bit.ly/9Y9g6Z">http://bit.ly/9Y9g6Z</a>	The Medieval Fenland	Henry Clifford Darby	1974
<a href="http://bit.ly/9IUBwt">http://bit.ly/9IUBwt</a>	The Draining of the Fens	Henry Clifford Darby	1969
<a href="http://bit.ly/5jsnkC">http://bit.ly/5jsnkC</a>	Global Self-consistent, Hierarchical, High-resolution Shoreline Database	National Geophysical Data Center	1996
<a href="http://bit.ly/9krdUU">http://bit.ly/9krdUU</a>	OpenData	(UK) Ordnance Survey	2010
<a href="http://bit.ly/cNr3Ci">http://bit.ly/cNr3Ci</a>	Web Mapping Services	British Geological Survey	2010

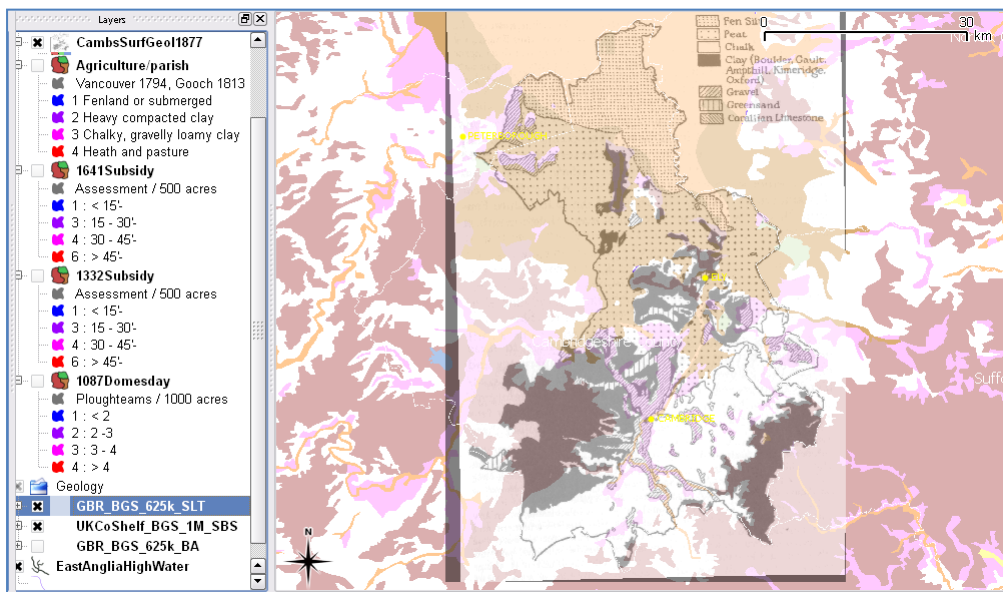
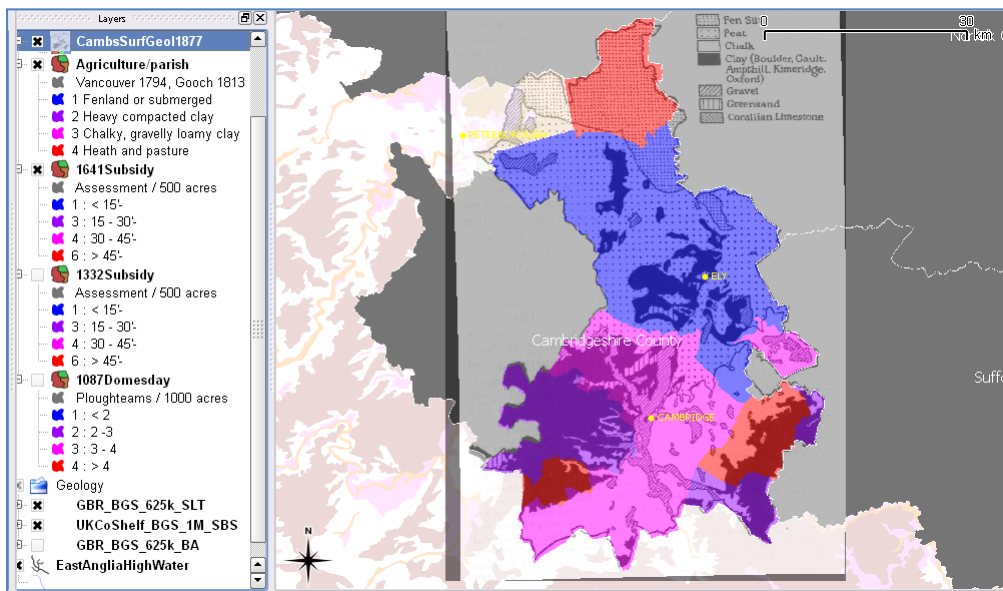
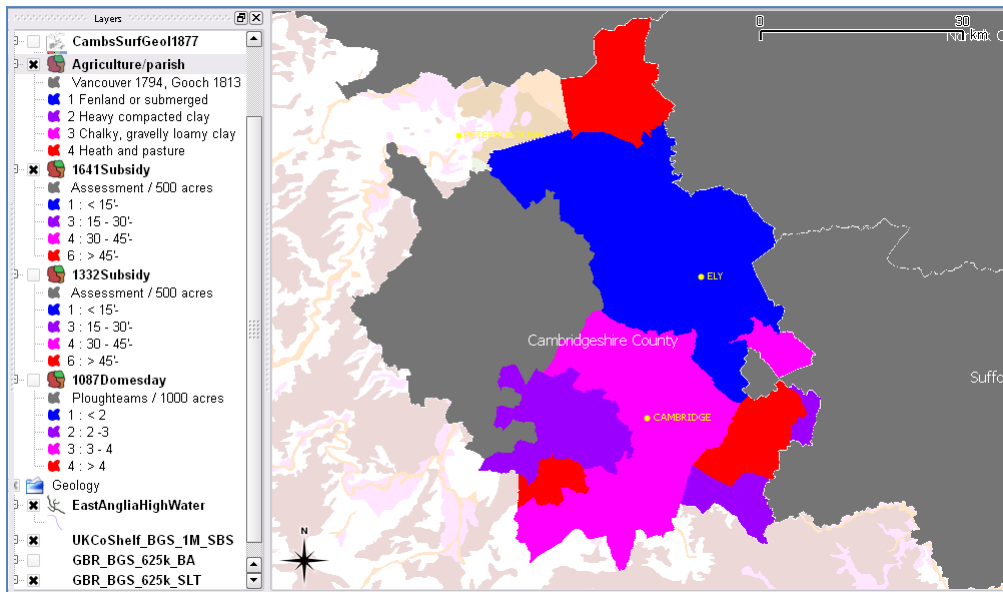




Legend notes

Subsidy	year	1327	1332	1641	
assessmt.		<b>"20th"</b>	<b>"15th"</b>		
criteria		<b>1/20</b>	1/15	<b>/1000 acre</b>	<b>/500 acre</b>
Darby		<b>15</b>	20	<b>30</b>	<b>15</b>
classificn.		<b>30</b>	40	60	<b>30</b>
values		<b>45</b>	60	90	<b>45</b>
	<b>original</b>	<b>15</b>	20		
	derived	<b>23</b>	30		
	<b>used</b>	<b>38</b>	50		

Classification	Subsidy	Domesday	Bowring			Bowring (last page)
		SurfGeol	R	G	B	
	0	0	155	155	155	= 0
	1	1	0	0	255	0 - 10
	3	2	155	0	255	10 - 25
	4	3	255	0	255	25 - 50
	6	4	255	0	0	> 50



From: Julie Bowring [julie.bowring@gmail.com](mailto:julie.bowring@gmail.com)

To: Andrew Zolnai [aizolnai@googlemail.com](mailto:aizolnai@googlemail.com)

Date: Fri, May 7, 2010 at 8:09 PM

Subject: Re: GIS of Fenland

[...]

What I've done so far with GIS is to map the rough population figures I have worked out; I've attached the shape-files to this email -- both are maps of population density by families/households per 1000 acres. I think that the projection may be the same as yours -- I got the original shapefiles from the GIS of Kain & Oliver's Ancient Parishes (<http://www.data-archive.ac.uk/findingData/snDescription.asp?sn=4828>) through the Arts and Humanities Data Service, and ArcGIS identifies the projection as GB1936. I'm happy for you to add them to your layers; I just ask that you identify me as the origin of the 1674 data, which I compiled from two transcripts of the original tax: the Huntingdonshire Hearth Tax Assessments for 1674, transcribed by Lawrie Chorley and Mo Eeles, indexed by Laurie Chorley, and typed by Nancy Travers and Mavis Russell (1992), and that of the Cambridgeshire Hearth Tax Assessments for 1674, transcribed and indexed by Norman and Vicky Uffindell (1987); both are deposited in the Cambridh Record Office. The 1563 data is from a published census - Dyer, Alan and D.M. Palliser, editors. The Diocesan Population Returns for 1563 and 1603. Oxford: Oxford University Press, 2005. Records of Social and Economic History New Series 3 - and Southall, H.R. and Burton, N., GIS of the Ancient Parishes of England and Wales, 1500-1850 [computer file]. Colchester, Essex: UK Data Archive [distributor], March 2004. SN: 4828.

[...]