# 1831 England and Wales census hundreds and wapentakes GIS shapefile documentation

# by Max Satchell

**filename: 1831EngWalesHundred.shp**

ArcGIS shapefile of 2433 polygons providing boundary and attribute data for the 1096 hundreds, wapentakes, wards, divisions, liberties and boroughs of England and Wales as given in the 1831 census (referred hereafter simply as hundreds for the sake of brevity). As such this represents the hundreds and counties of England and Wales as they were before the boundary changes caused by the Counties (Detached Parts) Act, 1844 (7 & 8 Vict. c. 61). The act led to changes in the hundreds through the elimination of some of the anomalies caused by the existence of detached portions of counties. Such units were absorbed into the county and hundred by which they were surrounded.

The GIS data originates from the 173 digital maps of the boundaries of English and Welsh parishes and their subdivisions produced by Roger Kain and Richard Oliver based on the listing in the 1851 census.[[1]](#footnote-1) The maps were subsequently converted into a single GIS by Burton *et al*.[[2]](#footnote-2) The GIS attribute data were checked, edited and enhanced with extra data from the census by Max Satchell, Tony Wrigley and a small army of research assistants with technical support from Peter Kitson and Gill Newton. This work was undertaken as part of *The changing occupational structure of nineteenth century Britain* project funded by the E.S.R.C. – RES-000-23-1579 and directed by Leigh Shaw-Taylor and Tony Wrigley. Max Satchell checked and in some cases edited the GIS polygon data using a variety of cartographic and documentary sources. Of these the most important were digital scans of the Ordnance Survey first edition 1:2500 and 1:10560 maps from the Landmark Group distributed by Edina[[3]](#footnote-3), the series of maps of registration districts and sub-districts boundaries prepared for the Registrar General prior to the censuses of 1861, 1871 and 1891 and the description of enumeration district boundaries given in the Census Enumerators Books for the censuses from 1851, 1861 and 1871. The 1:63,360 maps and Census Enumerators Books are held in The National Archives, Kew (TNA, RG 18/3-155, 198-227, HO 107, RG 9, RG 10). The work involved changing one or more elements of information about place, parish, county, or three figure census number for 2,461 (10.8 per cent) of 22,729 lines of data in the Kain and Oliver GIS. This editing process saw the redigitisation of 644 of the 22,729 polygons, the deletion of 81 polygons, and the digitisation of 525 new polygons.

The hundreds data was created as follows. Geoffrey Stanning under the supervision of Peter Kitson added the hundreds as given in the population tables of the 1851 census to each census parish or place as given in the Burton *et al* GIS. The remainder of the work was done by Max Satchell who systematically checked the hundred of each 1851 administrative unit against the hundred of the same unit as it was given in the enumeration abstract volumes of the 1831 census.[[4]](#footnote-4) The hundred of the unit was then changed to its 1831 designation where necessary. Where the census listed a hundred, wapentake, division, liberty or borough as belonging to a larger unit below the level of the county, such as a lathe, rape, riding division or part, its name is given in the separate column.

In some instances a parish or place lay within two or more hundreds in 1831 but was represented by only a single Burton *et al* polygon. In such situations the polygon was subdivided using a variety of cartographic sources of hundred boundary data where these were available. The most significant of these were those maps of the Ordnance Survey first edition 1:2500 and 1:10560 prepared from 1844 to c.1880 when hundred boundaries were still shown. Maps of boundaries prepared for the Boundary Commissions of 1832 and 1837 were also invaluable for borough boundaries.[[5]](#footnote-5) At the end of this exercise only two out of 23,177 polygons could not be assigned to any hundred, wapentake, division, ward, liberty or borough.

It should be noted that these data do not entirely represent the boundaries of the hundreds as they were in 1831 for two reasons. First, where a parish or place pertained to two or more hundreds and was represented by a Burton *et al* single polygon, but no boundary data was available to subdivide it, its polygon was assigned to whichever hundred had the greatest share of the population of its parish or place in 1831. Second, in a modest number of instances the 1831 census listed a particular parochial sub-division under one hundred but returned its population data under another. This GIS follows census practice in that the hundreds are defined by the administrative units which returned population to them.

The work was aided by an Emeritus Fellowship from the Leverhulme Trust, two British Academy Small Research Grants (SG 40833, SG 42909) awarded to Tony Wrigley with further funding under the British Academy's Research Project scheme (BARP) awarded to Leigh Shaw-Taylor. Our thanks go out to these organisations and to the Landmark Group and Edina for supplying the Ordnance Survey data. The shapefile comprises the standard ArcGIS .shx, .shp, .sbx, .sbn, .prj and .dbf files. The dbf file is described below.

**Attribute data**

#### 1831EngWalesHundred.dbf

The dbf table contains the following fields.

|  |  |  |
| --- | --- | --- |
| *Field* | *Data type* | *Description* |
| **FID** | Object ID | Unique ID for each row in the table |
| **Shape** | Polygon | Polygon/s for each ancient hundred as per the 1831 census |
| **HUNDRED31** | Text | Name of hundred, wapentake, ward, liberty, division or borough |
| **SUPRA\_HUND** | Text | Name of unit in 1831 superior to the hundred but subordinate to the county to which the hundred belonged (if any) |
| **COUNTY** | Text | Name of county |
| **COUNTRY** | Text | Name of country |

### Co-ordinate system

British\_National\_Grid

Projection: Transverse\_Mercator

False\_Easting: 400000.000000

False\_Northing: -100000.000000

Central\_Meridian: -2.000000

Scale\_Factor: 0.999601

Latitude\_Of\_Origin: 49.000000

Linear Unit: Meter

GCS\_OSGB\_1936

Datum: D\_OSGB\_1936

**Citation guidelines**

Satchell, M., Shaw-Taylor, L., Wrigley E.A.,1831 England and Wales census hundreds and wapentakes shapefile (2017). This dataset was created with funding from the ESRC (RES-000-23-1579), the Leverhulme Trust and the British Academy. The Satchell *et al* dataset derives from an enhanced version of Burton, N., Westwood J., and Carter P., GIS of the ancient parishes of England and Wales, 1500-1850. Colchester, Essex: UK Data Archive (May 2004), SN 4828, which is a GIS version of Kain, R.J.P., and Oliver, R.R., Historic parishes of England and Wales: An electronic map of boundaries before 1850 with a gazetteer and metadata. Colchester, Essex: UK Data Archive, May, 2001. SN 4348. A description of the dataset can be found in Satchell, M., '1831 England and Wales census hundreds and wapentakes GIS documentation' (2017, 2006) available at: http://www.geog.cam.ac.uk/research/projects/occupations/datasets/documentation.html

**Optional extra**

If on a second reference to the dataset you need an abbreviated reference, our suggestion is Satchell *et al*, 1831EWCH&Wshp. 1831EWCH&Wshp stands for 1831 England and Wales Census Hundreds and Wapentakes shapefile.

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**Errors and further corrections**

Collectively the research teams led by Roger Kain, Humphrey Southall and Leigh Shaw-Taylor have either directly or indirectly contributed many thousands of hours to create this GIS and have struggled to make it as accurate as possible. However, we remain interested in refining it still further. If you spot something that is wrong with the hundred boundaries, please email details to campop@geog.cam.ac.uk.

1. R.J.P. Kain and R.R. Oliver, *Historic parishes of England and Wales: An electronic map of boundaries before 1850 with a gazetteer and metadata*. Colchester, Essex: UK Data Archive, May, 2001. SN 4348 [↑](#footnote-ref-1)
2. N. Burton *et al.*, *GIS of the ancient parishes of England and Wales, 1500-1850.* Colchester, Essex: UK Data Archive, May, 2004. SN 4828 [↑](#footnote-ref-2)
3. Edina is the JISC national academic data centre based at the University of Edinburgh: http://edina.ac.uk/. [↑](#footnote-ref-3)
4. British Parliamentary Papers, 'Population Tables, 1851, Part I. Numbers of Inhabitants, in 1801, 1811, 1821, 1831, 1841 and 1851. Volume I. England and Wales, I-VII', 1852-3, Vol. LXXXV, C.1631; 'Population Tables, 1851, Part I. Number of Inhabitants in 1801, 1811, 1821, 1831, 1841 and 1851. Volume II. England and Wales, VIII-XI; Scotland; Appendix', 1852-3, Vol. LXXXVI, C.1632; 'Enumeration Abstract 1831 Vol. I', 1833, Vol. XXXVI, C.149; 'Enumeration Abstract 1831 Vol. II', 1833, Vol. XXXVII, C.149. [↑](#footnote-ref-4)
5. British Parliamentary Papers, 'Reports from commissioners on proposed division of counties and boundaries of boroughs. Parts I-VIII'. 1831-2, Vol. XXXVIII, XXXIX, Xl, XLI, C.14; 'Royal Com. on boundaries and wards of certain boroughs and corporate towns. Report, Parts I, II & III', 1837, Vol. XXVI, XXVII, XXVIII, C.238. [↑](#footnote-ref-5)