

# THE SOMERSET POPULATION PRIOR TO THE CENSUS OF 1801

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## SOURCE MATERIAL

The county histories written around the late 18th and early 19th centuries may be of limited value for researching early history of places in a particular county, but they can provide very useful data on those places at the time of writing. One such case is the *History of Somerset*, written by the Revd John Collinson, published by Cruttwell of Bath in 1791. In particular, the history contains information on the number of houses, annual christenings and burials, and population numbers for a large number of parishes, sufficient to estimate a county population for the years immediately before the first official census of 1801.

Knowledge of population numbers on a local basis was nothing new in 1801: most churchwardens had a good idea of the number of their parishioners in order to oversee their poor. It was around this time that Malthus<sup>1</sup> wrote his essay on population, thereby raising popular consciousness of population growth. It was his thesis that unchecked growth would result in a doubling of population every 25 years. The 1801 census, for all its limitations,<sup>2</sup> was just the first systematic collection of data over the whole country.

Indeed, local population data collection could go back centuries. For instance, the population of Frome hundred was quoted as precisely as 6506 in 1631.<sup>3</sup> However, in such a case, the precision is likely to have exceeded the accuracy: population numbers are dynamic and it is likely that by the time numbers were collated, births and deaths would have changed the figure. Table 1, to be discussed below, is also evidence of earlier precise surveys. The figures used in this study are of variable precision, often low. A population may be quoted as 'nearly 900' or 'about 600', although occasionally as precise as '1002'.

Collinson cannot take the credit for the gathering of population data. Most of this was done by Edmund Rack, more famous for his role as founder secretary of the Bath and West Agricultural Society.<sup>4</sup> It was collected hundred by hundred. A significant amount of Rack's material did not get into the published volumes. Collinson acknowledged Rack somewhat perfunctorily in the preface to his history, but there is a fulsome eulogy buried deep within the text, in the section on Bath.<sup>5</sup> Interestingly, the eulogy was supplied by Richard Polwhele, author of a contemporary history of Devon.<sup>6</sup> The link between Rack and Polwhele is not known, and Polwhele's history does not contain similar population data. Collinson must however take credit as the editor, in that his record was published, whereas Rack's full material is only now in process of publication.<sup>7</sup>

Rack was not alone in his collection of topographical material. He was ably assisted by Abraham Crocker of Frome, and useful material, to be discussed below, was also supplied by Richard Locke of Burnham on Sea. Their manuscript material is with Rack's at Bristol Record

Office, with photocopies at Somerset County Record Office, Taunton.<sup>8</sup> Note that material from a few hundreds is not in this public collection.

It is evident from Rack's notes that he set out his parish topographies with the intention of providing house number and population data as there is often space left with the headings present even when there are no data. The same prepared-but-vacant spaces can also be found for numbers of christenings and burials. That information was expected presumably from the vicar or churchwardens. In one case, Rack provided a population number, but the actual figure has become buried in the fold of the paper and cannot now be read.

Rack provided a number of houses for most parishes, often broken down into house numbers in each hamlet. The description often goes as far as the method and material of house building. Sometimes, populations are given for each hamlet. Collinson often, but not systematically, quoted these figures in his publication.

In a few cases, it is possible to deduce the date of Rack's surveys of particular hundreds from his letters to Collinson, but often his letters were dated by day and month only. A significant proportion had been done by the end of 1781.<sup>9</sup>

There are some discrepancies between Rack's and Collinson's material. In some cases this may have been due to Collinson receiving new material after Rack's death in 1787, but not in all cases. Some of these discrepancies, and some major differences between the Rack/Collinson data and the 1801 census are discussed below.

## PARTICULAR EXAMPLES

First, a few examples are given from Collinson (vol. 2): Laverton 'The number of families the parish contains is thirty, the inhabitants about one hundred and sixty'. Lullington 'The houses are thirty in number ... inhabitants one hundred and fifty-four'. Rode 'Only a village ... consisting of one hundred and seventy families'. Babington 'The christenings in this parish are annually on an average six, the burials four'. Hardington 'a parish almost depopulated'.

In Rack, there were the following differences: the population of Laverton was given as 162. Rode was quoted as having 190 houses and a population of about 1000. The christenings and burials figures for Babington were as Collinson, but additionally the village was given as containing 20 houses and a population of 100. This is well below the figure of 215 quoted in the 1801 census, but Rack surveyed Kilmersdon hundred in 1781,<sup>9</sup> a full 20 years earlier, and as it lies on the edge of the Somerset coalfield, a rapid increase in population could follow new mining developments. The population fell away again after 1801.

Rack had also surveyed Tellisford (in Wellow hundred)<sup>10</sup> in 1781. He quoted a population of 140 living in 20 houses. Collinson gives no numbers, but mentions a disastrous fire on April 9th 1785 which 'destroyed a third part of the village'. The population seems to have recovered and even grown a little by 1801.

Nearby, Rack quoted a population of 1560 for Mells, in 300 houses. This is significantly greater than the 1801 census figure. Rack also mentioned the presence of 80 houses uninhabited and in decay in the parish, suggesting a very rapid decline during the second half of the 18th century.

Frome was covered in considerable detail by Collinson, but Rack and Crocker's notes contain much more. The population and house numbers were broken down into the individual tithings of the town and East and West Woodlands. Indeed, within the town, the notes provide a street-by-street count of the number of houses. The figure used in this study is the population of the whole parish, to compare it with the 1801 census.

Both Rack and Collinson provided a detailed description of Shepton Mallet, complete with number of houses in the town and in the attached hamlets. The total figure quoted is 1138, with

a population of nearly 9000, with 4000 of those in the cloth or knitting industry. The 1801 census gives a figure of only just over 5000. This may be low, as the 1811 figure is over 6000, but there is still a big discrepancy, and not even the 130 in the workhouse in Rack's figures covers much of this. A population count of eight per house is high and might suggest some temporary development project, but the high number quoted as working in clothing tends to support the figure of 9000. Shepton had been the scene of early machine introduction, followed by smashing and riot, in 1776,<sup>11</sup> but that would not account for a catastrophic collapse in population through the 1780s and 1790s.

To the south of the county, Chard is unusual in that Rack provided a population but no house count. Also, the population quoted is much lower than the 1801 census figure. A near-doubling of the population over less than 20 years is unlikely. Perhaps there were figures for a missing tithing which Rack did not obtain.

Martock was both a parish and a complete hundred in itself. It had a population of 2000 and the characteristics of a large settlement with several subsidiary centres, so had the general formation of a hundred. It will be included in the accounting of the hundreds.

Two examples from the west of the county deserve mention. Rack's notes refer to a census of Wiveliscombe parish in 1777, and quotes this for the population of the town and of the whole parish. The figure published in Collinson is just that for the town. This study will use the figure for the whole parish.

The figures given for Minehead can be found in both Rack and Collinson. They quote comparative figures for the three districts of the town, both in 1783 and from an earlier census of 1705, and are given in Table 1. A detailed description of the trade of the port can also be found in both documents.

Table 1 Comparative population of Minehead, in its three districts, showing its decline  
(Collinson, II, 27)

	1705 houses	1705 people	1783 houses	1783 people
Higher Town	124	638	98	382
Lower Town	130	710	141	520
Quay Town	64	452	45	226
Total	318	1800	284	1128

No population data are given for the city of Bath, which was booming during the 1780s but that turned to bust in the early 1790s. Although it might be possible to estimate changes in population numbers from detailed study of rate books, that would be a massive task, and beyond the scope of this study. The overall growth of Bath will be assumed to be in line with that for the county.

There is a significant amount of population data for the villages immediately around Bath, and this includes points worthy of note. Notes on Weston indicated that the number of burials greatly exceeded that of christenings, but pointed out that that was due to the large numbers of (unsuccessful) health-seeking visitors to Bath who chose to be buried there. In the case of Bathwick, the burials are given exclusive of the numbers of 'outsiders'. Bathwick was also quoted as having a population of 250 by Rack and Collinson, which had grown to ten times that by the time of the 1801 census. This was caused by the development of Great Pulteney Street and its environs, starting in 1788 (Collinson referred to the area as 'Bathwick New Town'), and so is realistic. Conversely, Widcombe and Lyncombe showed a significant fall in population between the 1780s and 1801. Rack stated that there were regularly two or three families living in each house, and this would suggest an itinerant population, probably involved in quarrying or building. The housing market collapse of the 1790s could probably explain such a drop, as numbers had recovered by 1811.

Two other places in Collinson, Standerwick in Frome hundred and East Lambrook in Kingsbury East hundred, are not included in the 1801 census headings. Standerwick will be considered part of Berkley, East Lambrook part of Kingsbury. Nonetheless, Rack's population count of Kingsbury was only about half that of the 1801 census.

The slight difference between the author's calculated 1801 population of Somerset and that quoted in the Victoria County History is the result of differing considerations of the position of the county borders.<sup>12</sup>

## NUMERICAL CALCULATIONS

The population of complete hundreds was available for 11 of the 38 total for the county. This amounts to just under 30%. Curiously, Rack obtained complete population figures for some hundreds, yet did not quote populations for all the parishes in them. In a couple of cases, it has been possible to calculate a parish population by subtracting all-but-one parish figures from a hundred total.

Rack appears to have started off alphabetically collecting hundred populations, but tired of this rapidly. However, the early (alphabetic) hundreds are spread well round the county, so it is possible to get some idea of rates of population change of areas around the county (Table 2). Where known, the date of the survey of that hundred is also given.

Table 2 Total populations of hundreds with dates of surveys

Date of survey	Hundred	Main parish	Population by Rack	1801 Census
1783	Abdick and Bulston	Ilminster	7090	8068
1783	Andersfield	Creech St. Michael	1900	2004
	Bathforum	Batheaston	8250	10083
1786	Bemstone	Wedmore	4180	4825
1786	Brent cum Wrington	Wrington	2790	2987
1783	Carhampton	Minehead	5875	6616
1781	Chew	Chew Magna	2880	4150
	North Curry	North Curry	2800	2657
	Houndsborough, Berwick and Coker	East Coker	4900	6053
	Kingsbury East	Chard	3460	6019
	Martock	Martock	2000	2102

Apart from North Curry with its small decline, the hundreds show a population increase generally between 5 and 20%. It was noted earlier that Chard had probably been under-counted by Rack, but even after suitable adjustment, Kingsbury East still showed a large population growth. Chard was a detached parish within the hundred, which was mainly centred nearer to Langport.

Bath Forum showed strong growth, probably reflecting the boom in Bath, although not registering the subsequent bust. Although not dated, it is also likely to have figured early in Rack's survey. Chew was also an early survey, providing a longer period for growth up to 1801. The growth of Houndsborough suggests growing prosperity in the Yeovil area.

It is perhaps dangerous to infer too much from this sample, but the hundreds to the west of the River Parrett indicate a growth of 11%, approximately 0.6% per annum. Those in the central moors also provided a similar annual rate of growth. If a date of 1783 is assumed for the

southern hundreds, as known for instance at Abdick and Bulstone, the growth rate inferred was over twice as high, at 1.3% per annum. A slightly higher figure, 1.4% per annum is inferred for the hundreds near Bath and Bristol, even assuming them to have been surveyed the earliest.

Beyond complete hundreds, it is best to look at parish level. Of the 478 parishes in Collinson, population figures were given by Rack or Collinson for 235, just under 50%. There were 344 house counts, amounting to 72%, and 139 counts of baptisms and burials, amounting to just under 30%. The population figures were scattered well throughout the county, apart from those hundreds where Rack's notes are missing from the public record.

The simplest approach to estimating an earlier population would be to divide the total of the Rack populations by the population sum of these places in 1801 to give a figure of 0.906 and multiply this by the 1801 total, 272,813, to obtain a figure of 247,038, which should be rounded to the nearest thousand, giving 247,000.

The mean growth in settlement size was 24% and the median growth was 11%, suggesting that the smaller settlements contributed more to the total population. Indeed, 50% of the parishes enumerated by Rack had populations less than 300. Study of the hundreds has already indicated regional variations, and some allowance may need to be made for the date of survey, given the rapid population rise nationally at the time.

The various caveats given in discussion of some parishes above suggest that some filtering of the data is wise. In the first instance, some form of statistical filtering would improve confidence in the figures by removing extreme cases. Acceptance of values within two standard deviations of the mean would include about 95% of the sample and reject twelve extremes, either of massive growth or massive contraction. The ratio of 1801 to recorded population gives a skewed distribution, so cannot be used directly. However, the logarithm of this ratio gives a good approximation to a Normal Distribution, and has been used.

This filtering gives a population estimate of 90% of the 1801 figure, 246,000. As the large growth in Bathwick was considered genuine, a correction could be made for this figure to give 244,000. This assumes that Bath grew at the average county rate. If it had grown at the rate calculated for Bath Forum hundred, the starting figure for the county population would be 241,000.

The difference between the total population growth and the average for each parish suggests that the growth rate was higher among the smaller places. Figure 1 plots the statistically filtered Rack/Collinson population as a fraction of the 1801 population as a function of the 1801 census population. It has been done this way round so that an earlier population can be calculated from the later, known, 1801 figure. The wide scatter of ratios can be seen, so it must be understood that this is an estimate only, based on the 'norm', and does not reflect the wide scatter in fractions.

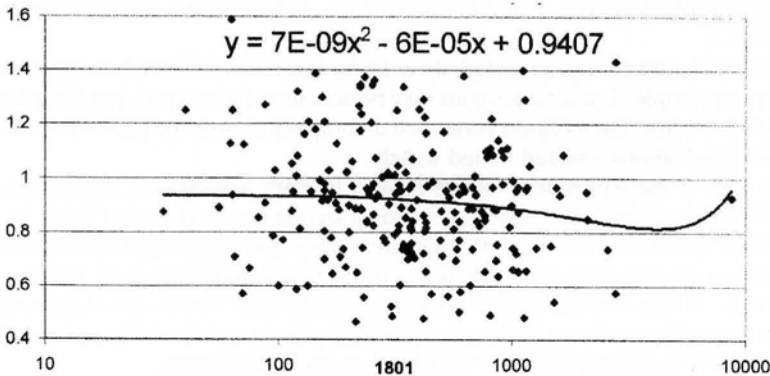


Fig. 1 Population from Rack as a fraction of 1801 population. Fraction plotted against parish population

A quadratic best fit has been calculated and this gives a value for the fraction:  $y = 7 \cdot 10^{-9} x^2 - 6 \cdot 10^{-5} x + 0.94$ , where  $y$  = the Rack population and  $x$  = the 1801 population.

The figure 0.94 indicates a fundamental growth rate amounting to 6%, but this is modified by the  $x$  term, which shows growth above this figure increasing by up to 10% above this for populations up to 1000, while the  $x^2$  term indicates growth rate reducing for the larger populations, approximately 1% less for those above 1000. The further below the '1' line a point is, the higher the growth. Note that 50% of parishes had a population of less than 300 in Rack's survey, and only 10% had a population greater than 1000.

If this is applied to all the 1801 data, a population can be estimated for each parish and these summed to give a total population. The largest parish of known population was Frome, whose population increase rate was below average over the period. Other parishes larger than 1000 souls tended to show a slow rate of growth. Bath lies outside the bounds of calculation, and must be excluded from this approximation. Bathwick was also filtered out.

Applying the multiplier of the equation shown above to all the parishes listed in the 1801 census gives a population estimate of 218,000 excluding Bath. Using the same estimates for Bath's population as above and allowing for the known increase in Bathwick's population yields a total population between 239,000 and 242,000, which agrees quite well with the statistically filtered average.

On these bases, the figure of 240,000 is the best estimate for the population of Somerset in the early 1780s.

It is possible to look at population growth on a regional basis in a little more detail than could be gleaned by looking at the population of hundreds. In this case the hundreds were divided up into a region of the county and the known populations from Rack's surveys compared to the 1801 census. Where known, a date has been ascribed to each hundred; some survey dates of hundreds have been inferred from dates of neighbours; where no date can be inferred, a median date of 1783 has been assumed. This enables the calculation of an average annual growth rate.

The regions have been selected on the basis of physical and economic geography:

South	south of a line from Taunton through Somerton on to the eastern border
West	west of the rivers Tone and Parrett, and including the south-west corner
North	north of the Mendip hills, and along the River Avon to the Bath area
East	the eastern border region next to Wiltshire, dominated by Frome
Central	from Shepton westwards across the North and South levels to the coast

These are somewhat approximate in description and there is a further complication of outlying parishes within some hundreds lying in other regions. This indicates differing growth rates as shown in Table 3.

These figures do not entirely agree with the information deduced from hundred totals, but are based on a larger sample. The total growths take no account of time span, but the annual growth rate is a good indicator. Each region contained a comparable span of parish population sizes, although total populations counted varied widely.

It appears that in the North area, which looked to Bath and Bristol, settlements grew on average at 1% per annum, quite rapidly, as shown by the hundred study (Table 2). The East area, dominated by the burgeoning cloth trade grew even faster (although it was to suffer later). The South region showed lowest growth, not as the hundred study indicated. This is surprising, given its fertility. It may be that localised pockets, such as near Yeovil, achieved better growth. Growth was generally moderate across the central lowlands and the hilly western region, but the latter may have benefited from the cloth trade around Wellington.

An average household size can also be calculated, although some care is needed in interpretation: sometimes numbers of houses were given, sometimes numbers of families. There

Table 3 Growth rates for the various regions. The total growth figure covered a varying period of time, but the growth rate is estimated on an annual basis

Region	Average annual growth of each parish	Total growth in region
South	0.56%	10.1%
West	0.89%	16.2%
North	1.03%	7.1%
East	1.17%	12.8%
Central	0.76%	10.7%

could certainly be more than one family in a house in some cases. Widcombe near Bath has already been mentioned in this context. The average was 5.33 per house. It should also be noted that the figure is in fact an average of averages. Within any parish, the variation in size would be much greater.

It is also possible to calculate a baptism and burial rate for those parishes where these figures exist as well as a population figure. Note that it is a measure of baptisms, not births and some babies would be lost before baptism. Also note that it would not normally include Dissenters. The baptismal rate was 29.5 per 1000 of population and the burial rate 18.7 per 1000, although this had a much wider variability than baptism. These figures indicate a rapidly growing population.

#### RICHARD LOCKE OF BURNHAM

Amongst the correspondence to Collinson<sup>13</sup> is a letter dated 1789 from Richard Locke of Burnham-on-Sea in which he gives a breakdown of the population of 20 parishes nearby, covering 128,000 acres. The parishes were stated to be in the hundreds of Bempstone, Brent and Wrington, Huntspill and Puriton, and in parts of both Glaston Twelve Hides and Whitley. One might guess that for the latter two, the parishes might have included Meare, Woolavington, Cossington, Chilton, and Edington. The total population for this area was given as 20,000 and was listed by male or female and status. The groups are shown in Table 4.

Table 4 Population split in Richard Locke's survey

Husbands	2500	Wives	2525
Widowers	600	Widows	1000
Bachelors	700	Spinsters	300
Sons	4500	Daughters	3500
Male servants	950	Female servants	1025
Male apprentices	400	Female apprentices	100
Male lodgers	850	Female lodgers	800
<b>Total</b>	<b>10500</b>	<b>Total</b>	<b>9500</b>

This shows a preponderance of males in the area, although it does not necessarily apply to the whole county. Bachelors and sons were significantly more than spinsters and daughters, although women were more likely to survive their spouse. The number of male apprentices was also much higher, although servant numbers were split quite evenly. One assumes 25 husbands were away from home during the survey, suggesting a figure of about 1% of households undertaking travel.

#### DISCUSSION

Two papers in particular have provided information on the pre-census population, but these have been limited to study of church registers.<sup>14</sup> This paper has discovered a more complete

source of material. It still requires careful interpretation but it can complement and extend the earlier analyses.

For instance, Davis' paper suggests an averaged annual baptismal rate of 31.5 per 1000 for the village of his study, Newton St Loe, in the early years of the 19th century. Unfortunately, neither Rack nor Collinson quote baptism and burial figures for this parish, although it is stated as being of 60 houses and 300 population (about 20% below the 1801 figure, but probably surveyed in 1781). The average quoted above of 29.5 is reassuringly close to his figure but we should also note a standard deviation is large enough to allow any value between zero and double that.

Davis makes clear that he considers this an under-estimate of actual birth rate as it takes no account of Dissent or pre-baptism mortality. The figures in this study shed no further light on this argument as they are based on the same records as he used. However, it does open up the possibility of taking select parishes from before the census where Dissenting records survive and testing the information further. Rack himself was a Quaker and does not himself seem to have any prejudice for or against the established church.

The burial rate quoted was more variable still, but with few exceptions less than the baptismal rate, providing grounds for an increasing population. Exceptions include Weston near Bath, which was discussed earlier.

Jackson's study is more complex and involves statistical analysis more deeply. He considers three typical demographic patterns for the period after 1750, up to when epidemics could wipe out several years' advantage of baptism over burial rates in but a short time (for instance Laverton had eleven burials in 1743, compared to the normal three).

Jackson's study area straddles the Somerset and Wiltshire borders and covers 52 parishes. Unfortunately, they are not listed, although a map is provided and it is possible to identify them by map work. It also appears that he has used modern civil parish boundaries rather than historical boundaries.

He identified three types of parish by population growth characteristics. Type A was typified by the larger parishes (including towns) in the cloth districts which benefited from high birth numbers and immigration, but which suffered high mortality rates and subsequently static or low growth characteristics. The equation used here tends to support this by showing lower growth associated with populations of over 1000, but of the figures available from Rack, only Bruton and Rode show any such tendencies.

Type B was typified by a rapid increase in rate of baptism over burial leading to a rapid expansion in population and Jackson associated such parishes with the Somerset Coalfield. Table 3 contained the coalfield mainly in the North district and this indeed showed a high growth rate, but not as high as that of the clothing areas, associated with the East district in this study.

Type C was typified by high but declining values of baptism-to-burial rates, leading to static population numbers, and Jackson suggested emigration as a further characteristic. He attributed this type to the rural areas of low population density. This study does not agree well with that observation, as higher growth rates appeared amongst the smaller communities, although low growth in the rural areas of Somerset defined by Central, West and South districts is indicated in Table 3. Note, however, that these districts lie well away from Jackson's area of study.

This paper does not therefore show good agreement with Jackson's study, but the remit of the two papers is not the same. Detailed study of Jackson's Somerset parishes might yield better agreement, but that would need access to his archive material. It would appear from this study, albeit based on incomplete material, that the cloth districts were growing faster than the coal districts in the last years of the 18th century.

As the data are not complete, and as some numbers are open to question, the figure of 240,000 given for the Somerset population can only be regarded as an estimate. As Bath, the largest



place, is missing from Rack's figures, the estimate is subject to wide variation depending on what assumptions are made about population growth in Bath.

However, the main purpose of the paper is not to make an exact calculation but to raise awareness of Collinson's *History*, and of Rack's contribution to that work, as sources of population and house numbers for Somerset in the years before the first census of 1801. In studying those data, it has also been useful to discuss the nature of the material and consider those cases where there is significant divergence between the earlier and later sources. Collinson must take credit for publishing his work, but honour is due to Edmund Rack and his associates for providing us with so much knowledge of the Somerset parishes as they were over 200 years ago.

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