

The 1870 United States Census and Black Underenumeration: A Test Case from North Carolina

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This study of underenumeration in North Carolina demonstrates some of the limitations of the 1870 United States census, especially for researchers investigating the African-American population. The author assesses the uniform undercount found in most mid-nineteenth-century American censuses and examines the probable further underenumeration of a sample of black North Carolinians drawn from three sources of black Union veterans known to have been living in North Carolina in 1870. However, this group's extensive use of aliases and altered names creates problems for researchers trying to track individuals in the manuscript census and other records.

Cette étude du sous-dénombrement de la Caroline du Nord illustre certaines des limites du recensement des États-Unis de 1870, surtout pour les chercheurs étudiant la population afro-américaine. L'auteur évalue le sous-dénombrement uniforme observé dans la plupart des recensements américains du milieu du XIX^e siècle et examine le sous-dénombrement probablement encore plus marqué d'un échantillon de Nord-Caroliniens noirs tiré de trois sources de vétérans noirs de l'Union que l'on savait avoir vécu en Caroline du Nord en 1870. Toutefois, l'usage répandu des alias et noms modifiés au sein de ce groupe nuit aux chercheurs qui essaient de retracer des individus dans les listes nominatives de recensement et d'autres documents.

LARGE NUMBERS OF SCHOLARS have used census manuscripts increasingly during the past several decades as a fundamental source to illuminate and analyze a broad range of historical issues. As this trend continues, historians have become more concerned with the need to measure the overall reliability of the manuscript data and to assess the levels of bias in the enumerations. Even today's national censuses, conducted by many highly trained enumerators and crafted by a permanent bureaucracy, cannot achieve complete accuracy. People are missed, a few are counted twice, and

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inaccurate information is recorded. One estimate of the 1991 United Kingdom census suggests that a population decline of about one million resulted largely from a higher underenumeration rate due to deliberate avoidance of the census by persons fearing how the information might be used.¹ Historians should not underestimate the levels of suspicion and fear of authority surrounding the popular response to a national census either in this or the last century.

While some of the problems of the census involve the collection of inaccurate information or inadequacies of the census conceptualization, perhaps the greatest problem lies in underenumeration of the population. Underestimation of the actual inhabitants can take two forms. Omissions by the enumerators which were randomly scattered across the whole of the population have been called "uniform underenumeration".² Such an undercount is the result of problems within the census mechanism rather than a product of particular characteristics of any subpopulation. Whatever the rate of the uniform undercount, all regions and all population groups are equally affected. Uniform underenumeration presented no serious concerns for the original purpose of the United States census, which was the redistribution of political representation and taxation. Similarly, as long as the omitted persons came from all groups and regions of the country, these omissions would not distort most historical analysis.

The second category of undercounting is far more troublesome for historians and social scientists. "Differential underenumeration" is a product of specific characteristics of a subpopulation or region which cause the enumerators to undercount that particular group. It injects a systematic bias into the data that distorts socio-economic or regional analysis. For that reason identification of the extent of the under-reporting based on sex, age, occupation, race, ethnic or religious background, or any other variable is important before the census manuscript is analyzed. Case studies serve a useful purpose in establishing the parameters of differential underenumeration over time and place.

An examination of the underenumeration within the 1870 United States census of African-Americans in the Reconstruction South offers one such example. The census of 1870 is agreed by most researchers to be one of the most inaccurate of all of the American censuses. Even the census superintendent, Francis A. Walker, warned that the censuses prior to 1880 were "loaded with bad statistics" and that the census of 1870 was particularly untrustworthy.³ The worst region covered is assumed to have been the

1 Bridget Hill, "Women, Work and the Census: A Problem for Historians of Women", *History Workshop*, vol. 35, no. 1 (Spring 1993), p. 79.

2 John B. Sharples and Ray M. Shortridge, "Biased Underenumeration in Census Manuscripts: Methodological Implications", *Journal of Urban History*, vol. 1, no. 3 (August 1975), pp. 409-439.

3 "Interview of the Select Committees of the Senate", *Senate Miscellaneous Documents*, doc. no. 26, vol. 1, 45th Congress, 3rd Session, December 17, 1878, p. 15.

South and the least well recorded subgroups to have been the poor, the young and itinerant, and the marginal elements of society. A rate of 10 per cent, or slightly more, has been cited occasionally as the level of undercounting of African-Americans in the 1870 census, but that figure is misleading;⁴ it referred to an undercount in excess of the uniform underenumeration rate. Few attempts have been made to assess the exact levels of inaccuracy found in the Southern enumeration.

It can be assumed that a reasonable estimate of the underenumeration rate for Southern African-Americans in 1870 will be the sum of two forms of under-reporting — the first being the persistent uniform underenumeration evident in the previous censuses of 1850 and 1860 (which used essentially the same collection mechanisms) and the second being an undercount specific to the South and to the black subpopulation. To examine a particular Southern population — black North Carolinians — we use two common techniques to measure underenumeration. The first is to estimate the size of a subgroup at a particular time based on a demographic analysis over time. Thus, we evaluate the long-term growth rate of the African-American population in North Carolina to establish a most probable estimate for 1870, which can then be contrasted to the findings of the 1870 census. The other technique is to select a sample population from a post-1870 period whose place of residence in 1870 is known. In theory, those individuals known to be living in the state in 1870 who do not show up on the census manuscripts will constitute the extent of the underenumeration. Of course, numerous factors can inflate the undercount. The war and the reconstruction efforts had generated specific regional problems for Southern census enumerators, so the regional level of uniform under-reporting would have been higher there than in the North. Enumerators in the Reconstruction South have frequently been described as political appointees, poorly educated, and alienated from the larger population. As such, their data are seen as error-prone. In addition, however, actions of the African-American population in the years after the war may have inflated the apparent underenumeration.

A century ago, when the census staff was created anew for each census and when patronage was more of a concern than competence in the selection of enumerators, the errors of the survey were significant. In 1870, the length of time needed to complete the enumeration of the census (about 100 days), the limited number of enumerators (6,500 for the entire nation), and the size of the territory each covered (up to 400 square miles or 20,000 inhabitants for some officials) all ensured that the data would contain errors and omissions. A number of case studies of the United States censuses from 1850 to 1880 have identified the possible range of errors in the data caused by underenumerating, by general errors of recording, and, to a lesser degree,

4 U.S. Department of Commerce, Bureau of the Census, *Negro Population in the United States, 1790-1915* (New York: Arno Press, 1968), pp. 26-27.

by overenumeration. While political historians have accepted, as a convenient rule, an undercount of 10 per cent for these censuses, specific case studies reveal considerable variation.⁵ Peter Knights placed the census omission rate for a group of well-educated, middle-class, native-born Bostonians over this period at between 11 and 14.7 per cent, and he estimated that the undercounting of illiterates and newcomers to the city in 1860 was in the low 20-per-cent range.⁶ He concluded that the censuses of 1850 to 1880 missed every sixth, and perhaps every fifth, person.

A study of the 1850 census based on Massachusetts genealogical records, distinctive in that it sought to track women and children as well as family heads, also placed the undercount as high as 20 per cent.⁷ The omission rates for both men and women were higher for young adults between 25 and 34 years of age, the unmarried, non-farmers, and people living in urban centres.⁸ The higher rates for these subgroups were also observed in later censuses.⁹ Worth noting was the percentage of the overcount found by John Adams and Alice Bee Kasakoff. While the overenumeration rate for all males (the men counted more than once by the enumerators) was only one per cent, it rose to 4.2 per cent for the more transient group of men aged 20 to 24. Of course, the existence of an overcount would effectively raise the real rate of underenumeration for this group.¹⁰

Since the 1870 United States census was carried out under the same set of regulations as those of 1850 and 1860, problems identified with the earlier censuses are common in the 1870 census. A study of the Philadelphia 1870 census recount estimated the underenumeration at approximately 18 per cent, a figure in keeping with those of Peter Knights and Caren Ginsberg.¹¹ This rate, however, also reflected migration and research error as well as undercounting. All of the studies suggest that, for these censuses, the error rates ranged from a minimum of perhaps 10 per cent in regions in which the enumerators were most thorough and most carefully selected to

5 Kenneth Winkle, "The U.S. Census as a Source for Political History", *Social Science History*, vol. 15, no. 4 (Winter 1991), p. 573.

6 Peter R. Knights, "Potholes in the Road of Improvement? Estimating Underenumeration by Longitudinal Tracing: U.S. Censuses, 1860-1880", *Social Science History*, vol. 15, no. 4 (Winter 1991), p. 521.

7 John W. Adams and Alice Bee Kasakoff, "Estimates of Census Underenumeration Based on Genealogies", *Social Science History*, vol. 15, no. 4 (Winter 1991), p. 528.

8 *Ibid.*, pp. 529-531, 534. This pattern was also found by Caren A Ginsberg, "Estimates and Correlates of Enumeration Completeness: Censuses and Maps in Nineteenth-Century Massachusetts", *Social Science History*, vol. 12, no. 1 (Spring 1988), pp. 71-86.

9 Richard H. Steckel, "The Quality of Census Data for Historical Inquiry: A Research Agenda", *Social Science History*, vol. 15, no. 4 (Winter 1991), pp. 592, 594.

10 In other words, in most studies the reported undercount is in fact the actual underenumeration minus the overenumeration. Adams and Kasakoff, "Estimation of Census Underenumeration", pp. 535-539.

11 Frank F. Furstenburg, Jr., Douglas Strong, and Albert G. Crawford, "What Happened When the Census Was Redone: An Analysis of the Recount of 1870 in Philadelphia", *Sociology and Social Research*, vol. 63, no. 3 (April 1979), pp. 475-505.

a rate somewhere around 20 per cent for specific subpopulations, especially those located in wilderness areas or rapidly growing urban centres.

There is reason to believe, however, that the census of 1870 was much less accurately recorded in the states of the ex-Confederacy than in the Northern ones. This was especially true for African-Americans, but it was also true for all of the population in large areas throughout the South. Lower literacy levels and a more dispersed population created greater problems in this region. Moreover, attempts in the late 1860s to reform the census procedure and to improve the reliability of the data had failed. A bill to improve the census process by increasing the numbers and competence of the enumerators had been drafted by a House committee chaired by James A. Garfield in 1869, but the bill died in the Senate. The defeat was partly due to the emotions raised by Section 2 of the Fourteenth Amendment.¹² Of greater significance, however, was that the proposed changes would have ended the practice of federal marshals selecting the actual enumerators or assistant marshals. Appointment of the enumerators, in the proposed bill, would have rested ultimately with the census superintendent.¹³ Because marshals were appointed on recommendations of Senators, Francis Walker, the new census superintendent, believed that Senators voted against the bill because they wished to retain "this large body of more or less lucrative appointments".¹⁴ As Walker pointed out, however, there was another concern in the South. Many Southern Republicans accepted the need to use the patronage offered by the office of enumerators to build up their party, to consolidate the black vote, and to combat the Ku Klux Klan. In general, the census supervisor argued, this was how the positions were used. In some states, including North Carolina, Walker claimed, where there was "a large and respectable white Republican vote", it had been possible to select intelligent and capable enumerators to do a competent job.¹⁵ In some districts with a very large black population and a minority of whites fiercely attached to the Democratic party, patronage took precedence over competency, and census reporting suffered accordingly.

12 Section 2 required that "representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each state, excluding Indians not taxed. But when the right to vote at any [federal] election ... is denied to any of the male inhabitants of such State, being twenty-one years of age, ... the basis of representation shall be reduced...." The debate over census reform was interlinked with the debate over changes in representation of the various states in the House of Representatives. With the end of the three-fifths clause in the Constitution, and with no other changes, the Southern states stood to gain perhaps 14 additional members despite a possible refusal to allow the newly freed African Americans the vote.

13 Margo J. Anderson, *The American Census: A Social History* (New Haven: Yale University Press, 1988), pp. 76–78, 83.

14 Francis A. Walker, "Statistics of the Colored Race in the United States", *American Statistical Association*, vol. 3 (September 1890), p. 97.

15 The other states identified by Walker included Virginia, West Virginia, Kentucky, Tennessee, and Missouri. Walker, "Statistics of the Colored Race", p. 97.

North Carolina was presented by Walker as an example of a state in which, by and large, competent enumerators were selected.¹⁶ It was a state, one might assume, where omission rates should represent a regional low and where, with Republican-appointed enumerators, African-Americans should be fully counted. Yet, when the long-term demographics of the state are analyzed in an attempt to extrapolate a probable figure for the 1870 census, this does not seem to have been the case. Indeed, the overall performance of the North Carolina enumerators seemed little better, and perhaps worse, than that of census officials elsewhere in the South. The decennial population growth rate for the South and for North Carolina reflected a very similar trend. According to the 1870 census, the black population throughout the South had grown 9.9 per cent during the 1860s, while the rate was 8.3 per cent in North Carolina. These figures were seen as plausible until 1880,¹⁷ when the decennial increase was reported at 34.9 per cent for the South and 35.6 per cent for North Carolina, almost four times as large as in the previous decade. Clearly a large part of the reported growth in the 1870s was the result of under-reporting the increase in the 1860s.¹⁸ Interpolation back from the 1880 figures suggests a black undercount specific to the South in 1870 of at least 10 per cent in most states and perhaps 12 per cent in North Carolina.¹⁹

In effect, then, the actual underenumeration of Southern blacks in 1870

16 An attempt was made to identify the enumerators in eastern North Carolina. Some 30-odd were located. Most were men in their late 30s and 40s, although one man, Simon Godwin of Johnson, was 67. All but one had been born in North Carolina. While it has been inferred that the enumerators were tied to the Republican party in the state, some of the enumerators had served in the Confederacy.

17 The black undercount of perhaps half a million was explained by white supremacists as resulting from the inevitable mortality associated with a free black population.

18 Complicating matters, an act of 1879 that had made extensive reforms to the census mechanisms, reflecting the earlier recommendations of the Garfield committee, served to produce a more accurate census count in 1880. Instead of 6,400 enumerators, there were more than 31,000 and they were under the direct supervision of the census office. Anderson, *The American Census*, pp. 98-99.

19 Anderson, *The American Census*, p. 89. The percentage of African-Americans in the total population of North Carolina did not change significantly (it was 36.4% in 1850, 36.4% in 1860, 36.6% in 1870, and 37.9% in 1880), suggesting a similar omission rate for the white population. Any accurate interpolation of growth rates for North Carolina for the decades from 1840 to 1890 is made difficult by the very large variation in recorded decennial rates.

North Carolina Population Growth

Year	Black pop.	% of total pop.	% gain, 10 yr.	% gain, 20 yr.
1830	265,000	35.9%	20.7%	48.1%
1840	269,000	35.6%	1.3%	22.3%
1850	317,000	36.4%	17.7%	19.2%
1860	362,000	36.4%	14.4%	34.6%
1870	392,000	36.6%	8.3%	24.1%
1880	531,000	37.9%	35.4%	46.7%

was very likely in excess of 20 per cent. This rate is a sum of, first, the persistent national underenumeration rate of at least 12 to 14 per cent found in a wide range of studies of the 1850 and 1860 censuses (as well as the 1870 count in Northern communities), and second, an undercount specific to the post-war South in excess of 10 per cent.²⁰ This estimation of an omission rate perhaps as high as one in four has been tested by applying a backwards linkage technique to locate in the census manuscripts persons known to have been in North Carolina in 1870.

The sample group chosen was drawn from black Union veterans known to have been in North Carolina in 1870. Three different sources were used to create three subsets of individuals. Since the overall sample was taken from three distinct record groups, it was possible to check for errors unique to any one source. The first subset used to test the accuracy of the 1870 census was drawn from African-American veterans living in the state who had applied for military claims in the years after 1870. These men were generally seeking back pay or unpaid bounties. The second group was taken from the pension files of black Union veterans, located both at the National Archives in Washington and at East Carolina University at Greenville. The information in the applications, which were submitted to the federal government after 1890, was both extensive and critically examined by contemporary officials. The third subset was chosen from black North Carolinians who were recorded in the 1890 census of Civil War veterans. This census was compiled during June 1890, in connection with the general census, and was a reasonably efficient attempt to locate all Civil War veterans, both white and black.²¹

All persons in the three samples shared the essential criterion of having been alive and in North Carolina in 1870. Moreover, it was possible to link all of the veterans to their military records and to use the information found there, such as age and complexion, to ensure that the correct individuals were identified in the 1870 census manuscripts. Records for the first two groups of veterans, men submitting military claims in the 1870s and those

20 Steckel, "The Quality of Census Data", p. 588.

21 In 1889 Congress had requested the Superintendent of Census to compile, on a special schedule of inquiry, the names, rank, and location of all American Civil War veterans. The Census Office prepared for the task by obtaining 458,677 names of Union veterans from the Pension Office. Armed with these lists, enumerators collected names throughout June 1890, and over the next 11 months these were compiled, organized, and verified. This census, however, was never published and in 1894 all of the schedules were transferred to the Commissioner of Pensions. As a result, they escaped the 1921 fire in the Commerce Department Building which so badly damaged the 1890 general census schedules stored there. The individual entry for each veteran usually consisted of: a house and family number; given names and surname, then rank and unit designation; date of enlistment and discharge, plus length of service; 1890 post office address; any information on disabilities, general remarks. Although the enumerators were to collect only the names of federal veterans, in the South large numbers of Confederate veterans were recorded, as well as veterans of other wars.

applying for pensions after 1890, yielded the greatest amount of information. The various applications which they submitted to the government frequently listed all of their places of residence since the war. It was possible to select only individuals for whom this information existed. This established their 1870 residences at least to the county or town level, making their identification in the 1870 census more exact. It was not possible to establish place of residence in 1870 for the third group of veterans, the men listed in the veterans census in 1890, although most men located in the 1870 census manuscripts were found to be living in the same places as were identified for 1890.

There was an important difference in the information available for the men making up the first two subsets and that available for individuals in the third. The need of the first two groups to establish, beyond doubt, that they were who they claimed to be in order to get pensions, back pay, or unpaid bounties forced them to identify and explain the use of any aliases or changes in the names under which they had enrolled in the army. By contrast, there was no way with the sample drawn from the Civil War veterans census to follow the use of aliases, except to check that the names the men were using in 1890 corresponded to the names used during the war.²² The issue of aliases and name changes is of particular concern for anyone attempting to track African-Americans through the Reconstruction era.

Of course, all researchers who have attempted to link census manuscripts to other records are conscious of the problems and difficulties of tracking individuals whose names are sometimes recorded in different ways in various records. Most common are the various possible ways in which the phonetics of a name may be spelled and the literary shortcomings of the enumerators. Researchers who are tracking a *Pierce* will, as a matter of course, also check for *Pearse*, *Peirce*, or *Peerse*. Records of a *Burfort* will sometimes appear as *Bufort*, for example. Researchers of African-Americans in North Carolina freed by the Civil War face an additional problem. Most of these individuals, like ex-slaves elsewhere in the South, had chosen surnames as one of their first acts of freedom. How they picked their names and their willingness to replace their first choices varied enormously. Many chose their surnames on the same grounds as did Daniel Hill, who wrote that "I took the name after my owner."²³ Others may simply have been recorded that way by Union recruiters, thus guaranteeing that at least some would later wish for new surnames. Some of the ex-soldiers who changed their names did so for the same reasons that prompted former private

22 The veterans census gave, for most entries, the company and regiment in which they had served. The sample for this study was drawn only from the veterans who could be absolutely linked to their wartime records. This, of course, eliminated anyone who had changed his name, in whole or in part, from 1865 to 1890.

23 National Archives (U.S.), RG94, Pension Records, Records of the Adjutant-General's Office, "Daniel Hill".

Jeremiah Gray to become Jeremiah Walker: "I enlisted under [the] name Jeremiah Gray, my master's name," he wrote. "Since I came out of the war I changed my name to that of my father and now I vote and pay taxes under [the] name of Jeremiah Walker."²⁴ Sometimes the veterans continued to be known by both names. Thus the son of one veteran wrote that his father had "enlisted under the name of America Etheridge or America Baum, his real name being Etheridge, but was owned by Mr. Baum, either name being correct". The same son later wrote of "my father America Etheridge (real name America Baum)".²⁵ In other cases, names that seemed appropriate when selected in 1863 were altered over time (thus Allen Newborn later was called Allen Newton). Moreover, since these names were recorded by regimental clerks and census enumerators whose level of literacy was sometimes only slightly higher than that of the veterans, wide variations in spelling were inevitable.

The problems which the alteration of names would present to any census enumerator were evident well before the war ended. The federal army undertook a census in occupied eastern North Carolina in the summer of 1863, probably as the first step in assessing the potential for recruiting within the state. An office was established in New Bern and an enumeration of all of the African-Americans in the district was begun. The officers in charge soon became aware of the difficulties of recording surnames in a community in the throes of self-definition. The census officers ultimately gave up and decided to record only the Christian names of the African-Americans "because they change their surnames (titles they call them, and often they are nothing else) according to the names of their employers or when ever they take a fancy to".²⁶ This year was a period of exceptional fluidity for the black community flooded with refugees, but many of the problems facing the army enumerators and especially the issue of aliases would certainly face enumerators in 1870.

The pension records provided an opportunity to measure the size and nature of the problem of aliases. A sizeable number of these ex-soldiers indicated that they had used at least two different names from the time of their enlistment, between 1863 and 1866, until they began applying for pensions after 1889. The aliases ranged from significant variations in the spelling of what was essentially the same name to the use of entirely different names. An examination of all the pension applications, 930 individual files, allowed us to place the uses of aliases into four categories.

The first group consisted of pension applicants who had altered the

24 National Archives (U.S.), RG94, Pension Records, "Jeremiah Gray".

25 National Archives (U.S.), RG94, Pension Records, "America Baum".

26 New Bern, N.C., Tryon Palace Restoration Complex, Collections Branch, *Henry A. Clapp Letterbook*, Henry A. Clapp to "Dear Mother", March 14, 1863.

spelling of their names in very different ways over time, but with no apparent intent to change the name. Cases of creative spelling of the same phonetical name were not included. Thus Bryant to Brant, Edwards to Eddes, or Newborn to Newton were included but variations of Pierce were not. This category made up 8.1 per cent (75 of 930) of the total number of pension applicants.

The second group was made up of pensioners who changed part of their names, most often the surnames, between serving in the army and applying for pensions. Examples from this category include changes from Toney Mizell to Toney Vincent, or Albert Davis to Albert Hassels. A less common case was the pensioner who changed Hywood Tucker to Emery Tucker. These cases made up 6 per cent (55 of 930) of the total.

The third and smallest group consisted of men who gave entirely different names on their military records and their pension applications. In applying for their pensions, each indicated the name which he had used while still in the army. Thus, John P. Bowens had used the name Primus Frink, while Lamb Bell became Cornelius Lafitte. These men made up only 1.2 per cent (11 of 930) of all of the applicants for pensions.

The final category consisted of men applying for and receiving Civil War pensions whose names do not appear on any of the roster lists or military records. Usually their applications included three or four affidavits from other veterans whose names do appear in the regimental lists and who testified that the candidate for pension had served with them in the regiment. The Pension Office generally accepted their evidence and the veterans almost always received some form of pension. This category consisted of 7.8 per cent (73 of 930) of the total.

When the four groups were combined, the percentage of veterans who are known to have used an alias of some form reached 23.1 per cent (214 of 930). Of course, some of these aliases may have been used only after the 1870 general census had been taken. On the other hand, the aliases picked up in the pension files were not likely all of those used by or attributed to the veterans in the decades after the war. For a researcher trying to link names on the census to other records, these aliases would inflate the apparent rate of underenumeration. It would not necessarily be true that because veterans could not be located in the census manuscript they had not been enumerated.

A thorough attempt was made to locate in the 1870 census all of the individuals selected from the disallowed military claims, the pension records, and the census of Civil War veterans. In the case of all groups, any known aliases and possible variations in the spelling of both names were considered during the search. A sizeable number of the potential cases had to be abandoned because those veterans apparently resided in one of the counties for which complete records do not remain from the census. Unfortunately, important gaps in the 1870 census in North Carolina occurred in counties such as Craven and Beaufort, which were home to large

numbers of the black veterans. Ultimately, 824 veterans, 114 from the disallowed military claims records, 396 selected from the pension files, and 314 from the 1890 census, were used to try to measure the undercount of the 1870 census. Since North Carolina was credited with providing the Union army with 5,035 black soldiers, the total sample selected corresponded to over 16 per cent of all the black soldiers raised within the state.

The number of these men who could be identified beyond question in the 1870 census was quite low. The problem of linking was compounded by the quality of the data which had to be used in identifying individuals. The problem of names has already been addressed. The ages of the veterans, recorded at different times in the records, were also inexact. For the purpose of linking, the age given on military records or pension records had to correspond, within four years, to that given by an individual on the census manuscript. One example illustrates the potential difficulty. Over the years, Frank James submitted a variety of pension forms on which he indicated his age. According to these forms he could have been, in 1870, 44, 46, or 48 years old.

There were a number of individuals located in the 1870 census who seemed probable, but not certain, matches to the veterans being tracked. In some cases, the ages given in the census for these men differed by more than four years from those given in other records. In others, the first or last names varied in ways that seemed more than simply poor spelling. In a few cases, ex-soldiers located in the census were living in counties that did not conform to those listed in the veterans records (for a match to be considered possible in this situation, the county cited in the census had to be adjacent to that listed in the pension files). Most of these men were entered in the "possibly located" category.

The number of veterans who could be definitely located in the census manuscript seemed at first to be surprisingly low. In all three samples, only slightly more than half of all the veterans could be positively located (see Table 1). Even if all of the possible cases were included, about 12 per cent for all three groups, the census enumerators in 1870 still appear to have missed one in three of the black Union veterans in North Carolina. Minor variations in the findings can be explained by the different characteristics of the sample groups. The strong correlation of the numbers in the three categories supports the overall conclusions.

The veterans who could be located most certainly were those who had submitted claims for back pay or bounties still due from the military in the years following the war. Of these men, 57.5 per cent could be found in the census manuscripts. This sample was drawn from applicants in the early 1870s who, like later pensioners, had to prove their wartime identity. The other two groups were drawn from records generated in 1890 or later, by which time more name alteration may have occurred and the information which pensioners provided may have been affected by gaps in their memory. Because the pension applicants needed to deal with the issue of aliases,

Table 1 Recovery Rate of Black Veterans in the 1870 Census Manuscript

Veterans selected	Number	Percentage
<i>From disallowed claims</i>	114	100.0%
Located in 1870 census	65	57.0%
Possibly located	14	12.3%
Not located	35	30.7%
<i>From pension files</i>	396	100.0%
Located in 1870 census	218	55.1%
Possibly located	48	12.1%
Not located	130	32.8%
<i>From Veterans Census</i>	314	100.0%
Located in 1870 census	158	50.3%
Possibly located	37	11.8%
Not located	119	37.9%
<i>Total of veterans</i>	824	100.0%
Located in 1870 census	441	53.5%
Possibly located	99	12.0%
Not located	284	34.5%

Source: 1870 U.S. census; pension and veterans records, U.S. National Archives (see text).

the pensioners' rate of location in the 1870 census manuscript was somewhat higher, 55.1 versus 50.3 per cent, than that for the men found in the 1890 veterans census.

Evidence from another Southern state suggests that the results of this study of North Carolina veterans are valid. A limited examination of underenumeration in the 1880 census conducted in Georgia used probate records and tax digests to link 192 men and women from three rural counties in the state to the census manuscript. About 35 per cent of the men could not be located in the census manuscripts even though the enumeration of 1880 is generally conceded to be one of the more accurate of the censuses.²⁷

This study of underenumeration in North Carolina has demonstrated some of the limitations of the 1870 census, especially for researchers investigating the African-American population. Certainly for black North Carolinians, the 1870 census deserved its reputation of questionable reliability. The use of the demographic model to assess the underenumeration in 1870 suggests that the black undercount in North Carolina was about 12 per cent higher than in other censuses. Linkage techniques to measure the same issue in 1870, however, indicate that about 35 per cent of all adult male African-Americans were missed by the enumerators. Of course, the latter figure is inflated, but

27 Steckel, "The Quality of Census Data", pp. 588-589.

to a degree difficult to measure precisely, by the problem of name alteration over time. Combining the results would yield a model in which as much as 20 per cent of the African-American population was missed during most census enumerations, with the rate rising to probably 30 per cent in 1870. The model would also suggest that uniform underenumeration was considerably larger than differential underenumeration for African-Americans.

When assessing the usefulness of the census, historians need to be alert to the danger of equating an inability to locate in the manuscript persons known to have been alive in a particular area with a failure of census enumerators to record those individuals. Some persons believed missed by enumerators may, in fact, be persons using an altered name who were thus only missed by later researchers. The generation of Southern blacks freed by the Civil War chose and re-chose names in ways which have frustrated researchers trying to track them in the manuscript census. Perhaps 10 per cent of the veterans missed in this study had given the enumerator a name unknown to the researcher, a problem that must be addressed in any assessment of the correct underenumeration rate. Historians of the South using various linkage techniques to study African-Americans in the Reconstruction era should do so only with a heightened awareness of the problems created by altered names.