WHY THE HOMESTEADING DATA ARE SO POOR (AND WHAT CAN BE DONE ABOUT IT)

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Data available to scholars on homesteading are of very poor quality—inconsistent, unreliable, inaccessible, incomplete—and surprisingly, they haven't been getting any better. Even basic questions such as how much homesteaded land was "proved up," how much land was commuted, or how many actual farms were created by homesteading cannot be answered with any assurance. Moreover, the answers given today mostly depend on quantitative studies completed forty or more years ago.¹

Key Words: digitization, General Land Office, homestead, Homestead National Monument, National Archives

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Why should this be? After all, we have witnessed in recent decades a staggering increase in the capacity and convenience of data handling by using computers. The publication of the Historical Statistics of the United States, Millennial Edition—a massive compendium expanded to five volumes (only two were needed for the 1975 edition) and available online—only hints at the enormous expansion of data now available to scholars. Any decent research library offers access to a huge menu of large electronic data sets, including databases of decennial and other censuses; surveys, polls, and publications of all sorts; and all manner of official, legal, commercial, and other records. Homesteading is an exception to this trend.

Part of the reason for the poor quality of data is that scholars have largely lost interest in homesteading. For four decades, with important exceptions noted below, few scholarly articles or books on the topic were published. The treatment of homesteading in college textbooks, encyclopedias, and the like has diminished, with homesteading becoming only one element, and often not a terribly important one, in the larger narrative of settlement. As a result, few scholars have been attracted

to work on the quality of homesteading data. But another part of the explanation is that homesteading records are hard to access, discouraging scholars from entering the field. The original files are locked up in the vaults of the National Archives and Records Administration (NARA) in Washington, DC. They are available file by file, which is fine for genealogists but very tough for scholars building databases. Thus the difficulty of getting to and working with primary materials has led to a kind of lazy acquiescence to forty-year-old studies.

There may now be a revival of academic interest in homesteading. If true, scholars will need to be supported by easier access to betterquality data. In the following sections, I first describe what the quality problem is. Next, I consider the work of several individual scholars and teams of scholars to illustrate the potential benefits of better data. I then review the original or primary homesteading documents involved, and I conclude with some suggestions for how we might achieve a substantial improvement in the quality and accessibility of homesteading data.

What difference does the poor quality of homesteading data make? Does it matter whether homesteaders obtained 253 million acres or 270 million or 285 million? Does it matter that we lack reliable state-by-state data, or that we cannot seem to disentangle commutations from free-land patents? It seems to me that it does matter, but probably the way it matters most is that our inability to get even the totals right illustrates the barriers that scholars face when attempting to do research in this field. The absolute lack of more disaggregated data blocks scholars from answering a whole series of deeper and more interesting questions about homesteading.

Who in fact were the homesteaders? What were their ethnic (and racial) backgrounds? What differentiated successful from unsuccessful homesteaders—for example, was there a threshold level of investment in plowing, animals, fencing, and so forth, undoubtedly varying with region and period, that was associated with success? Was homesteading (as distinct from land speculation) profitable? Was literacy significant? What kinds of family or other social networking ties explain the spatial pattern of homestead claims? Which agricultural techniques (again, surely varying by region and period) produced success? How were homesteads joined with other lands (obtained through, for example, preemptions, purchased land, rented ground, and relatives' holdings) to construct viable farms? How many initial claims wound up as successful farms?

Probably the richest source of data to answer these and many other questions is the mass of homestead records. Such data may need to be used in combination with other sources, such as land transfer ledgers, the decennial censuses, school records, vital statistics, or tax records, depending on the question being asked, but they contain a huge amount of information now lightly used. As I note below, there are some stunning examples of new electronic archives that have made other historical data available; they provide potentially significant linkages to homesteading data, but more importantly they demonstrate what is possible. If we are to have a robust scholarship of homesteading, we must have better-more accurate, detailed, richer, more comprehensive, and more accessible—data.

BASIC HOMESTEADING DATA TODAY

When scholars look for data on homesteading, there are seven basic sources. Unfortunately, each is seriously flawed.

Homesteads. This is a twenty-eight-page pamphlet published in 1962 by the Bureau of Land Management to celebrate the sesquicentennial of the BLM's establishment and the centennial of the Homestead Act's passage. It displays, for each of the thirty-one homesteading states, and for each year between 1868 and 1961, the exact number of final entries in the state and the number of acres granted for those claims. The pamphlet reports that there were 1,622,107 successful homestead entries for which 270,216,874 acres were granted. For the

data given, this pamphlet appears to be a definitive official source. (Only a trivial amount of homesteading was completed after 1961, for which other data sources exist, so the truncation of the period poses no serious problem.) And indeed many scholars, myself included, have depended on this source.

A little scratching below the surface, however, reveals that the numbers in Homesteads should be treated with considerable skepticism. First, there is virtually no documentation of where the pamphlet's numbers come from. No statistician or compiler of the data is identified, and there is only the statement that "[t]he material was compiled from records of the Bureau of Land Management of the Department of the Interior."² A brief list of references at the end gives data sources for 1885-1905, 1905-40, and 1940-61; obviously missing, most likely by mistake, is any source for 1868 to 1885. Confidence in the data is somewhat further eroded by discovering, for example, that the first column of the second table, "Final Homestead Entries, by Years, 1868-1961," is summed incorrectly.³

A more serious concern is the reliability of the sources cited. For the years 1905-40, the source is given as follows: "The 'Weeder Log.' An informal record log of final homestead entries maintained in the Bureau of Land Management. The log has subsequently been accepted as an official tabulation."4 Thus we learn that producing Homesteads did not involve a new and careful assay of actual homestead records, but only the recompiling of existing internal BLM listings of unknown accuracy.

There is a further problem. A note attached to "1868-1961 acres, total" states: "Includes commuted entries. There are certain classes of entries, not exceeding 160 acres, for which cash was paid for the land. Consideration was given for reduction in residence and other requirements." An entryman, fourteen months (later reduced to six months) after filing on a homestead, could purchase or "commute" it instead of waiting five years to take title as free land. Especially after 1890 or 1900 commutations became numerous and constituted a lucra-

tive method by which speculators and others grabbed land intended for "actual settlers." So including commutations drastically alters and contaminates the meaning of the Homesteads data. Including commutations is made more problematical by the early reporting of them: Thomas Donaldson's The Public Domain, Its History, with Statistics, discussed below, compiled data for 1863-1883, and it became a frequently cited source (and may be in part the missing source for Homesteads). But Donaldson noted that for his period "Commutations of homesteads are reported as part of 'cash' sales of each year's business [i.e., mixed in with other cash sales], and therefore cannot be stated."5 Thus for the early period, commutations are evidently excluded from final entries, despite what Homesteads claims, since commutations were not separately recorded from other cash sales.

Homesteads is also limited because it provides no data on original entries or unsuccessful claims, nor of course any of the other variables that would be of great interest—such as the entryman's sex, race, family, and so on.

Public Land Statistics. The Bureau of Land Management publishes an annual report on the land it manages, and it includes tables on the acquisition and disposition of the public domain. Table 1-2 of the 2005 report states that land "Granted or sold to homesteaders" was 287,500,000 acres. Unfortunately, no source or provenance for this figure is given.

One notices immediately that the total is a very round figure, though whether it represents a crude estimate or is simply the rounded version of an underlying and unknown more precise calculation is not stated. As in Homesteads, the figure is clearly intended to include commutations; unfortunately, the total differs from the Homesteads datum by 17,283,126 acres. Which figure is (more) correct is not known.

Annual Reports of the Commissioner of the General Land Office. From the 1812 establishment of the General Land Office (GLO), the commissioner was required to report annually to Congress on the business conducted by his office; after 1863, the report included homesteading data. The 1910 *Report*, for example, gives a running national total for final homestead entries and acres granted from "passage of the homestead act to June 30, 1910." It also provides a detailed breakdown, by state, of homestead entries, here separating commuted from final entries, as well as entries under the Timber Culture and acts, some data on the number of alleged fraudulent entries, and so on. Many of the other sources discussed here rely on these GLO *Annual Reports*.

Until a better source comes along, the *Reports* will remain fundamental. But how accurate are they? The only scholar I know of who has investigated their veracity is Paul W. Gates, and he was dubious. Gates (discussed below) apparently spent considerable time and effort attempting to reconcile differences among sources, but a note he appended to one of his tables expressed his frustration:

Every effort has been made to reconcile the inconsistent data concerning land entries in the GLO Annual Reports, the compilations of the public Land Commissions, and Homesteads. . . . This has not always been possible. For example, the Bureau of Land Management maintains that commutations are included in their totals in Homesteads but detailed checks show clearly that for some of the busiest years they were not so included. I have used data in the Report of the Public Land Commission (Washington, 1905), in the hope that because it was compiled later than the annual reports they may be more accurate. Some of the commuted homesteads are obviously not included.8

We do not know how the data in the *Reports* were collected or with what diligence or care, but frequent complaints that the General Land Office—besieged by the urgency and huge volume of claims and without adequate space even to store its records—lacked sufficient staff to do the statistical work properly. Commissioner Fred Dennett in 1910 expressed the problem:

For some time past I have been fully aware that one of the great deficiencies in this bureau is the nonexistence of a division of statistics. Congress, in the sundry civil bill last session, authorized the employment of 25 more clerks. It seemed, however, the proper procedure to assign to these positions men who were employed . . . for [another] purpose. . . . The stress in the office is such that every clerk is fully occupied in an attempt to bring the work up to date. . . . [I]t has been found impossible, therefore, to detail five or six clerks from work on which they are now engaged to this important statistical work. This I very much regret, as I realize that we have no adequate method for the compilation of the important statistics which pass through this office.9

Under such circumstances, the data cannot be presumed to be very reliable. Moreover, changing definitions and statistical procedures over the years introduce unknown variations into the *Reports*' data.

Reports of the Public Land Commissions of 1880 and 1905. There were two commissions chartered by Congress to investigate the operation of the government's land disposition policies. The first, in 1880, published its own report but is better known through a separate volume published by Thomas Donaldson called The Public Domain, Its History, with Statistics. Donaldson was careful with numbers, and his book's data have been widely used. The 1905 commission also published a multivolume report replete with statistics. Gates preferred to use The Public Domain and the 1905 commission report rather than the GLO Annual Reports, but he gave no rationale for his hope that "because it was compiled later than the annual reports they may be more accurate." In any event, these sources obviously provide no data for the years after 1905.

GLO Tract Books. When an entryman filed his or her claim for a homestead, and again when he or she applied to prove up, the transactions

were entered into a ledger or "tract book" at the local land office; a separate tract book was kept at the GLO headquarters in Washington. For someone seeking to construct a new homesteading database, using the tract books initially seems attractive, because there are relatively few of them—there are 167 volumes of Nebraska tract books, for example, and 168 Kansas volumes. With all the transactions already listed, the entries simply need to be read, interpreted, and put into database form. Unfortunately, the tract books contain entries for all land transactions, not just homesteading filings, so separating out the homesteading entries could be a fairly large job. But the main problem may be the tract books' unreliability, since they vary greatly in accuracy and even readability. They were created by overworked land agents who had disparate levels of skill, honesty, and commitment.¹⁰

How accurate were the tract books? To judge by Commissioner Dennett's appraisal in his 1910 Annual Report, the tract books were not very carefully kept: "There has been a consistent effort made during the past fiscal year to improve the condition of the tract books. . . . It is found that up to recent years there has not been sufficient attention paid to this line of work." So far as I know, no one has attempted to assess the accuracy of the tract books.

The Historical Statistics of the United States, Millennium Edition. Leading scholars at Stanford, Harvard, Wisconsin, and other universities spent many years constructing the data presented in this massive and exceptionally valuable compilation.¹² It presents three tables under the title "Homestead entries," labeled "Original entries Number (Cf76)," "Original entries Acreage (Cf77)," and "Final entries (Cf78)" giving acreage only.

The total acreage granted to homesteaders is given as 253,432,000. Annual figures are rounded to thousands. A note attached to Table Cf78 indicates, "Acreage figures of final entries do not include commuted homesteads," but there is no explanation for how the data were constructed. It does raise the possibility

that since the Historical Statistics total acreage apparently excludes commutations and the Homesteads and Public Land Statistics figures include (some) commutations, the Historical Statistics numbers could be consistent with one of the other two. Indeed, it would seem to suggest that land granted for commutations was (at least) either 16,784,874 acres (using the Homesteads datum) or 34,068,000 acres (using the Public Land Statistics datum), but drawing conclusions by mixing sources of differing and unknown reliability is risky.

While this source seems promising, it also has several problems. The source notes indicate that the data are taken from Donaldson for 1863-1883, then for following years from the Annual Reports of the Commissioner of the General Land Office; that is, Historical Statistics is a compilation of older compilations, and as we have seen there are serious concerns about the accuracy of the Annual Reports. Curiously and unfortunately, the Historical Statistics includes only original entries, not final entries. But most limiting of all is that it presents only national totals, with no state-level disaggregation, and of course it includes nothing on such variables as homesteaders' gender, race, family, and so on.

History of Public Land Law Development. Gates was the twentieth century's most eminent student of public land, and his History, published in 1968, is his authoritative (and final) overview. In it, he presents various useful data, which are not as comprehensive but more detailed than the above sources. For example, among his tables are "Number and Acreage of Land Entries in Dakota Territory" (covering 1863 to 1885 and including original and final entries with respective acreages plus preemptions and Timber Culture entries and acreages), and "Original and Final Entries of Homestead and Timber Culture Claims and Preemption and Commuted Entries" (covering 1881 to 1904).¹³ Since Gates was an extremely careful researcher, his work benefits anyone who just happens to need the particular data he constructed.

But while his numbers are probably the most accurate, Gates ultimately relied on the same earlier compilations as the citations above, mainly Donaldson, the *Annual Reports*, and the Land Commission reports. Moreover, the lack of comprehensiveness severely limits the utility of Gates's data, and he too has no data on sex, race, family, assets, and so on.

IMAGINING WHAT IS POSSIBLE

The aggregate data sources described so far are inconsistent and contaminated, but even if they were perfectly accurate they would still be highly limiting because they include so few variables. To see the range of what is possible we must look elsewhere. The first place to look is in the work of individual scholars who have constructed their own databases, and here there are two clusters of research on particular homesteading topics that run counter to my suggestion of scholarly neglect. In these cases, scholars have fashioned their own databases.

The first and by far more significant cluster is research on women homesteaders. A number of outstanding studies of women's participation in homesteading have been published during the past two decades; an excellent example illustrating this work is H. Elaine Lindgren's study called Land in Her Own Name. Lindgren created a rich sample of 306 women homesteaders in North Dakota, including not only such expected variables as name, initial entry, and final transaction but also ethnic background, marital status, and age. She supplemented many of the cases with qualitative information gained through interviews with homesteaders or their relatives, and gathered an engrossing collection of photographs as well. On the basis of this exceptional data source, Lindgren was able to provide a factually based view of women entrymen almost entirely missing from the traditional literature on homesteaders.¹⁴

A second outstanding example of a scholar developing her own database and deriving significant findings from it is Katherine Harris's study of homesteading in two northeastern Colorado counties. Despite her wariness—"I

will attempt a description of homesteaders and their homestead ventures using a notoriously unappealing tool: statistics"—Harris develops a database of 482 homesteaders (covering some variables) and 3,455 (on other variables) using federal land records and family histories. She recognizes the dangers of unrepresentativeness in using her "comparatively small sample" that apparently was not randomly drawn. Nonetheless, she is able to provide a highly revealing (and in some results, surprising) analysis of women's experiences in filing and proving up homestead claims, in marriage, widowhood, fertility, survival of children, age at death, and other variables. Her analysis richly validates her assertion that "numbers can reveal much that would otherwise remain obscure or hidden."15

Numerous other examples of outstanding data-based research on women homesteaders could be cited, because the recent interest in the topic has required scholars to develop new methods and new information sources to answer their questions. Nonetheless, as these scholars themselves frequently caution, the databases they have so painstakingly constructed are small and perhaps unrepresentative samples with all the well-known limitations of such samples.¹⁶

The second cluster of new work on homesteading is being done by economic historians, who use homesteading as a new venue for applying economic theory. This line of work may be illustrated by a study by Zeynep K. Hansen and Gary D. Libecap, who constructed a sample of 1,430 homestead entries in five eastern Montana counties using General Land Office records and a second sample of 5,954 farms (not necessarily homesteads) in three other counties of eastern Montana using county directories and census records. Their study is especially revealing because they have longitudinal data (e.g., for one sample they have data for 1916, 1922, and 1929). Using statistical analysis, they show how the drought of 1917-21 was crucial in effectively ending the era of homesteading in that region (160-acre farms had a very high probability of failure) and driving farm consolidation. They also offer evidence to suggest that the remarkable change in western politicians' attitudes—from steadfast opposition to strong support for statutory amendments that would allow enlarged homesteads—can be traced to this same process.¹⁷

These examples and some others—there are not many—suggest the richness of historical interpretation that beckons, if better data were available. Unfortunately, they also illustrate the extraordinary amount of work required to construct such databases.

Other scholars has taken a decidedly different approach to creating historical databases namely, they have constructed large general or reference electronic databases that can then be used by many scholars studying diverse topics. Two such data sets are of particular relevance here. One is the impressive "Population and Environment in the U.S. Great Plains" archive (www.icpsr.umich.edu/PLAINS/) constructed by a team of scholars led by Professor Myron Gutman at the University of Michigan. This archive makes accessible a great deal of agricultural, social, and demographic data for the period 1870-2000, including the decennial censuses, censuses of agriculture, weather data, and data on a variety of other variables. The second big archive is the Integrated Public Use Microdata Series (IPUMS) (www.usa. ipums.org/usa) at the University of Minnesota's Population Center. IPUMS makes available American population samples drawn from every surviving federal decennial census from 1850 to 2000. Although unfortunately neither electronic database includes any information on homesteading, they brilliantly display what is possible.

THE PRIMARY MATERIALS FOR HOMESTEADING DATA

The good news for historians and other scholars is that a mountain of rich and revealing information exists, because each of the official transactions at the base of all homesteading data was documented by a piece of paper, and those pieces of paper have been

preserved. An entryman, after locating a suitable piece of ground, would go to the local land office and fill out an application and pay fourteen dollars, thereby formally filing his or her claim to a homestead. The register would enter the filing in his ledger or "tract book," the receiver would issue the entryman a receipt for the fee, and the documents would be sent on to the General Land Office in Washington. At the GLO, the information would be entered again in tract books and an individual record file created. The entryman then had five years (later amended to shorter periods) to occupy the land, begin cultivation, and make some improvements.

Between five and seven years later the successful entryman returned to the local land office to prove up, bringing along two "credible" witnesses to attest that the entryman had fulfilled the requirements of the law; the entryman submitted his or her application for title, signed various affidavits, and paid a four-dollar fee. The register and the receiver noted the transaction in the tract book and forwarded the application, affidavits, fee receipts, signed certificates, and other materials to Washington. After scrutiny by Washington clerks, the GLO mailed a patent (deed) to the entryman, keeping a copy for its files, which document showed the formal transfer of land from the public domain to the entryman.

Thus the homesteading process generated paper records for every transaction, and in fact dual records, considering both the tract book entry and the original forms. The land involved was very specifically and carefully described, and the entryman clearly identified; the homesteader's file, now archived by NARA in Washington, often contained other materials such as letters, notices, death certificates, and so on. Given all these various materials in the file, much can be learned about the entryman—not only sex and age but typically also his or her family, ethnic background, assets, farming strategy, and more.

Even an unsuccessful entrymen, that is, an individual who filed a valid homestead claim but did not prove up, generated a paper trail, and it too would handsomely repay study. A would-be homesteader might have failed for any of an almost infinite number of reasons, but his or her failure appeared officially in one of the following forms: (1) The entryman abandoned the land, called "relinquishing" his or her claim. When it could be shown that a person had in fact quit the homestead, the land reverted to the public domain and the relinquishment was entered into the land agent's tract book. As is well known, the sale of relinquishments, which was illegal but almost never enforced, generated a flourishing market, especially after 1890 or 1900. (2) The entryman "commuted" his claim, that is, paid for the land at the prescribed public-land-sale price of \$1.25 per acre (\$2.50 per acre in the government-retained sections of railroad grants). Commutations also became much more common later, again after 1890 or 1900, and were widely seen as a loophole permitting much fraud and abuse. The relevant point for us is that excellent materials for studying homesteading failure, or for comparing successful and unsuccessful homesteaders, also survive.

As noted, scholars have tended to rely on the GLO Annual Reports because they are fairly accessible, and the Reports are important historical documents in themselves. But of course they are only compilations of what are the true primary materials, the individual entry files, and in any event, as we have seen, the Reports themselves are of suspect accuracy. Certainly the best database would be one constructed from the individual case files. But their enormous number and inaccessibility has forestalled anyone from using the case files other than to dip into them for anecdotes. There are some 1.6 million files for successful entries, which are stored in boxes on the shelves of NARA. The average box is estimated by NARA staff to contain fifteen pieces of paper, counting all the forms and receipts and affidavits. The colossal task of opening, examining, and recording their contents has deterred anyone who might have thought about it. Moreover, as any scholar who has worked with primary records knows, going from original documents to a service-

able and reasonably accurate database requires great effort and ingenuity. These barriers have proved fatal to the use of homesteading data.

In addition to their inaccessibility, the vulnerability of these records should be noted, making their preservation a matter of great urgency. The records were printed or handwritten in the late nineteenth and early twentieth centuries on acid-based paper, then tri-folded and stored in acid-based paper envelopes. They are now very fragile and falling apart. They are under constant threats from deterioration, fire, natural disasters, even terrorism. The recent flood at NARA's main building in Washington, though it thankfully damaged no homestead records, illustrates the risk.

OPENING UP THE HOMESTEAD CASE FILES TO SCHOLARS

This situation has left homesteading data in virtual stasis for forty years, but it could be about to change. The key to opening up this data treasure is digitization. If the entry files were to be digitized, then they would become available for data-handling and data-mining techniques developed for use with other databases. As with other large databases, the homesteading files could be used by researchers to draw statistically valid and relevant samples of whatever size needed. The immense insight and understanding lying dormant in these records could then be opened to view.

How to digitize the records is not without questions. Indexing is one issue. And because the homestead records involve land, they are inherently spatial, thereby suggesting that a Historical Geographic Information System might be the optimal platform or context for digitization. GIS could make the database searchable, and it could lead to the linkage of these records with GLO plat maps and survey field notes.18

How likely is digitization? After a very slow and unenthusiastic start, NARA now appears to be warming to the idea that it needs to make its records electronically accessible. Given its vast archives and the fragility of many of its documents (which raises the cost of handling them), any plan for NARA itself to pay for sufficient staff to start in at the beginning of its files and just digitize its way through to the end is simply too massive and costly to be feasible. Also, it is unclear what priority the homesteading files would be given on NARA's schedule for digitizing—the result could well be another generation or two before the entry files became available.

Recognizing these problems, NARA has now circulated a draft "Plan for Digitizing Archival Materials for Public Access, 2007-2016," dated September 10, 2007. The plan envisions as one of its four strategies, and one may suppose, in effect, its principal strategy, that

NARA will partner with organizations from a variety of sectors (private, public, non-profit, educational, government) to digitize and make available holdings. . . . Partnerships will enable NARA to make more digitized holdings available than we could on our own, because the partner will bear most of the expense of digitizing.¹⁹

Anticipation of partnerships to digitize the homestead records appears to be very preliminary; still, any movement is encouraging.

One example of such a partnership is that between Homestead National Monument of America (Beatrice, NE), a unit of the National Park Service, and the University of Nebraska-Lincoln. These partners have been working for several years on a project that would microfilm and possibly digitize the entry files to ensure preservation of and greatly improve access to the records. The partnership has completed a pilot project in which the entry files for the Broken Bow (NE) land office, which operated between 1890 and 1908, were microfilmed and have been indexed. It appears unlikely, however, that the partners will be able to scale up to a level commensurate with the vastness of the homesteading records.

In the immediate future, a different model drawing on more varied partners and harness-

ing the potential of the Internet appears to have more promise. One emerging partnership, growing out of the Homestead National Monument of America and University of Nebraska-Lincoln project, may include governmental agencies, university and private nonprofit entities, and a private for-profit firm. It would utilize a substantial volunteer staff as well as attempt to harness an Internet business model. This broader consortium seems to be the type of arrangement that NARA is encouraging through its new plan.

Whether the partnership model can deliver on its promise is unknown, but scholars of homesteading should be encouraged that after forty years of non-benign indifference there appear to be signs of movement.

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NOTES

- 1. I use "homesteading" to refer to any claims for free land made under the Homestead Act of 1862 and similar acts, including the Timber Culture Act (1873), the Desert Land Act (1877), the Kincaid Act (1904), and the Enlarged Homestead Act (1909).
- 2. Bureau of Land Management, Homesteads (Washington, DC: U.S. Department of the Interior, 1962), 1.
- 3. The figure given in the table for 1868-1900 is 488,138, whereas the numbers above it actually sum to 599,402.
 - 4. Bureau of Land Management, Homesteads, 28.
- 5. Thomas Donaldson, The Public Domain, Its History, with Statistics (Washington, DC: GPO, 1884), 350.
- 6. This series is a continuation, under a different name, of the General Land Office Annual Reports, discussed below; contemporary reports are so different from their predecessors that I treat them separately. Bureau of Land Management, Public Land Statistics 2005 (Washington, DC: U.S. Department of the Interior, 2006), 7. The figure of 287.5 million acres appears as early as the 1962 edition.

- 7. General Land Office, Report of the Commissioner of General Land Office (Washington, DC: GPO, 1910), 19.
- 8. Paul W. Gates, History of Public Land Law Development (Washington, DC: GPO, November, 1968), 494.
- 9. General Land Office, *Report* (1910), 9-10. On the GLO's space constraints, see page 7.
- 10. For an example of research using the tract books, see Katherine Harris, Long Vistas: Women and Families on Colorado Homesteads (Niwot, CO: University Press of Colorado, 1993). Harris uses many other sources as well.
 - 11. General Land Office, Report (1910), 5.
- 12. Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan R. Olmstead, Richard Sutch, and Gavin Wright, eds., *Historical Statistics of the United States*, *Millennial Edition*, (New York: Cambridge University Press, 2006); online at http://hsus.cambridge.org/HSUSWeb.
 - 13. Paul W. Gates, History, 409, 494.
- 14. H. Elaine Lindgren, Land in Her Own Name: Women as Homesteaders in North Dakota (Norman: University of Oklahoma Press, 1996).
 - 15. Harris, Long Vistas, 57.
- 16. Other examples of outstanding research in this area, but not a comprehensive list, are Katherine Benton-Cohen, "Common Purposes,

- Worlds Apart: Mexican-American, Mormon, and Midwestern Women Homesteaders in Cochise County, Arizona," Western Historical Quarterly 36, no. 4 (Winter 2005): 429-52; Barbara Handy-Marchello, Women of the Northern Plains: Gender and Settlement on the Homestead Frontier, 1870-1930 (St. Paul: Minnesota Historical Society Press, 2005); and Wava G. Haney and Jane B. Knowles, eds., Women and Farming: Changing Structures, Changing Roles (Boulder, CO: Westview Press, 1988).
- 17. Zeynep K. Hansen and Gary D. Libecap, "The Allocation of Property Rights to Land: U.S. Land Policy and Farm Failure in the Northern Great Plains," *Explorations in Economic History* 41 (2004): 103-29.
- 18. I am indebted to an anonymous referee for this point. For HGIS, see Anne Kelly Knowles, ed., Past Time, Past Place: GIS for History (Redlands, CA: ESRI Press, 2002), and Anne Kelly Knowles and Amy Hillier, eds., Placing History: How Maps, Spatial Data and GIS are Changing Historical Scholarship (Redlands, CA: ESRI Press, 2008).
- 19. National Archives and Records Administration, "Plan for Digitizing Archival Materials for Public Access, 2007-2016, Draft for Public Comment" (Washington, DC: September 10, 2007), 9; http://www.archives.gov/comment/nara-digitizing-plan.pdf.