OHIO: A SOCIAL LABORATORY FOR LAND SURVEY AND SALE
by
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The founding and ordering of the public domain by a succession of congresses, starting with the Continental Congress of 1780, is one of the great themes of American History. It is a story of infinite complexity, and nowhere is that better revealed than in that part of the public domain that became Ohio.¹

In 1780 the Continental Congress, representing a nation still struggling for its very existence, resolved that the states claiming unappropriated western lands surrender those claims to congress "for the common benefit of the United States," and that those lands "be settled and formed into distinct republican states which should become members of the union and have the rights of sovereignty and freedom and independence like the other states."² Audacity succeeded, and in time the vision became reality. Acrimony and controversy accompanied every step of the process, but time bears witness to the wisdom of these initiatives.

And what vision! Never before had a republican government addressed such an issue. Seldom in human affairs do political units voluntarily surrender sources of power and wealth, and congress' resolve that new states be added to the developing nation, and that they be given full and equal powers with the existing states, was not only generous, it was statesmanship of a high order. Realization of the Continental Congress' idealistic goals was made possible by the Peace of Paris (1783) in which Great Britain recognized the United States of America and gave to the new nation a princely realm stretching from the Appalachians to the Mississippi, from Canada to Spanish Florida. Of special importance were the lands lying north and west of the Ohio River. States with claims in this region promptly surrendered them to congress—Virginia (1784), Massachusetts (1785), and Connecticut (1786)—thus creating the nation's first public domain and allowing congress to get on with the job of structuring and administering the region known as the Northwest Territory.³

How was congress to manage this enormous wilderness empire? The legislators were forced to improvise: history offered no appropriate model. Nor could congress concentrate exclusively on this task, for it was wracked by fundamental problems involving sectional jealousies, trade, debt, Indian pacification, and national defense. To a degree, all of these concerns were related to disposition of western lands, so congress pressed ahead, passing the Ordinance of 1784 designed to create new states in the trans-Appalachian West. Terms of the Ordinance were never implemented,
but they reveal a determination to create new states and to use a rectangular survey for public lands.\textsuperscript{4}

It is beyond the scope of this essay to trace the origins of federal land practices and the political ordering of the public domain, but it is clear that the Confederation Congress was experimenting. The Northwest Territory was its laboratory, and that portion of the Territory where the critical experimentation with land policies occurred was to emerge in 1803 as the State of Ohio.

This study deals with land surveys and sales in Ohio, principally in the early stages of its development. Of the new states formed from the Northwest Territory and succeeding portions of the public domain, Ohio alone would be a crazy quilt of original land survey patterns. In the words of Vernon Carstensen, Ohio was "a kind of surveyor's museum."\textsuperscript{5} Having tried a variety of options in the Buckeye country, congress ultimately fastened upon a rational, uniform pattern of land survey that was used with only minimal exceptions in every emerging state that followed Ohio into the Union, save Texas and West Virginia.\textsuperscript{6} The complexities of the Ohio experience defy easy summary, but we can reveal enough of them in brief scope to sustain Ohio's uniqueness.

Congress, although anxious to proceed with the orderly survey and settlement of the Northwest Territory, realized that its task would be lightened if Indian title could be vacated. This objective was accomplished to congress' satisfaction by the Treaty of Ft. McIntosh in 1785 wherein subchiefs of the Delaware, Wyandot, Ottawa, and Chippewa tribes were coerced into signing away all Ohio lands except for a substantial section in the northwestern part of the future state. The Ohio tribes rejected this seriously flawed treaty, but congress proceeded on the assumption that it was valid. Supplemental treaties at Ft. Finney (1786) and Ft. Harmar (1789) did little to assuage Indian anger.\textsuperscript{7}

By 1786, however, federal surveyors were already marking off Ohio land. In the Indian wars that followed, U.S. forces under Josiah Harmar and Arthur St. Clair suffered humiliating defeats, but Anthony Wayne's victory at Fallen Timbers in 1794 broke the Indians' spirit and revealed the powerlessness of their British supporters. The Treaty of Greenville in 1795 established a boundary line separating Indian country from regions open to white settlement. This line, opening two thirds of Ohio to settlement, was honored by most Indian leaders, and it was to have profound effect on the survey of Ohio lands.\textsuperscript{8}

Even as congress sought title, it was debating how best to survey and order lands in the Northwest Territory. The rectangular or New England survey system was chosen in preference to the popular but chaotic indiscriminate claim, or Virginia system. The latter system was employed in just one portion of Ohio, and we
shall see the problems that ensued. Congress also debated sale policies. Should the land be surveyed so as to encourage small purchases direct from government land offices, or would sales be stimulated and income maximized by selling large units to land speculators? These and related issues have long been studied by historians of the public domain. Our concern is not with those debates but with what actually happened in Ohio as congressional policies were applied to the survey and sale of public lands.

There was a certain urgency to the debates: squatters were crossing the Ohio in ever increasing numbers and settling on public lands to which they had no legitimate claim. Experience with squatters in colonial times had convinced many legislators that these free spirits were prone to ignore authority. The English traveller, Capt. Basil Hall, referred to them as "free and easy settlers who are their own lawmakers." Many were Scots-Irish pioneers, long on the cutting edge of the frontier, and they crossed the Ohio from western Virginia, Maryland, and Pennsylvania and from Kentucky. Their historian, Edgar Hassler, characterized them as "bold, stout, industrious men, sharp at bargains, fond of religious and political controversy and not strongly attached to government." Their cabins always contained a Bible, rifle, and whisky jug. They bore an intense hatred for the Indians believing "the extermination policy to be the proper model."

Congress was well aware that aggressive squatters were a source of trouble in Indian affairs, but what to do about it was another matter. Shortly after the War of Independence, there may have been two thousand or more living in Indian country on the Ohio side of the river. Congress passed resolutions ordering them to evacuate and sent Josiah Harmar's small United States army to enforce this mandate, all to no effect. Open defiance enhanced the legislators' determination to curtail squatting by enacting laws establishing the orderly survey and sale of western lands.

Congress enacted the Land Ordinance of 1785 on May 20 after spirited debate and much amendment. Terms of the law are familiar. No land was to be entered prior to survey. The Geographer of the United States was to direct a survey of lands west of the Ohio River. The survey was to be on the rectangular pattern with north-south lines intersecting east-west lines forming a grid, whose basic unit was a six-mile-square township. Townships were to be divided into thirty-six, one-mile-square sections. North-south rows of townships, called ranges, were numbered consecutively from the meridian. Townships in each range were numbered consecutively northward from the Ohio River. Sections were numbered in a uniform pattern within each township. Once a plat was complete and registered at a government land office, a purchaser could secure a deed described by range, township, and section number. The description was unique. If the land had been properly surveyed, confusion over boundary lines was absolutely minimal.
Congress reserved section 16 of each township for support of schools, and it reserved sections 8, 11, 26, and 29 for future disposition. One seventh of the surveyed land was to be set aside to honor bounty warrants from Continental veterans. Also reserved were salt locations, mill sites and a percentage of precious metals.

Sale provisions favored speculators. To speed sales, land could be sold in entire townships, but the smallest unit which could be purchased from the government land office was one section (640 acres). Land was to be sold at auction at a minimum price of one dollar an acre to be paid in specie or its equivalent. There was to be no credit.14

The first survey in what came to be called the Seven Ranges started in 1786 when Thomas Hutchins, Geographer of the United States, personally ran the east-west base line extending 42 miles westward from the Pennsylvania border. The survey was completed the following year despite Indian problems and difficult terrain. Sale of Seven Ranges land was disappointing, however, and many years passed before the bulk of the region was in private hands.

Even as Seven Ranges land was coming on the market, congress was considering sales to private land companies and individuals. The principal group lobbying congress was called the Ohio Company of Associates. Composed of officers who had served with Massachusetts regiments during the Revolution, the associates were an uncommonly attractive group of potential settlers. So congress violated its own recently enacted legislation setting a minimum price for federal land. It agreed to sell 1,500,000 acres adjacent to the Seven Ranges, but the Ohio Company was allowed to pay in depreciated continental securities which brought the actual price paid to about twelve and a half cents per acre. Even at that, the Company could raise money for just half of its anticipated purchase.15

In other regards, the Ohio Company purchase embraced most provisions of the 1785 Land Ordinance. Land was surveyed on the six-mile-square township grid; section 16 was reserved for schools; sections 8, 11, and 26 were reserved for future disposition by congress. And new elements were introduced: section 29 was set aside as ministerial land for the support of churches, and two townships (seventy-two square miles) were set aside for the support of a university.16

Congress added a second purchase to Ohio Company holdings some years after the initial grant, and in 1792 added the Donation Tract along its northern boundary. The Company was to administer this tract as a buffer against Indian attack. To encourage settlers, congress gave 100 acres free to any male over eighteen who would actually settle thereon. This assignment of free land to settlers anticipated by seventy years the more famous Homestead Act of
1862.\textsuperscript{17} Congress negotiated yet another private sale, this one with the New Jersey speculator, John Cleves Symmes. Although he sought 1,000,000 acres between the Miami rivers, he eventually paid for somewhat over 300,000 acres. Terms of the Symmes, or Miami Purchase were similar to those of the Ohio Company. He too was allowed to purchase land with depreciated Continental securities, in this case worth about sixty-six cents on the dollar. The Purchase was privately surveyed on the six-mile grid, and it is the only original survey in the United States with ranges numbered south to north and townships numbered from west to east. North of the Purchase, the federal survey called "Between the Miamis" continued these practices.\textsuperscript{18}

While congress was involved in private sales, it allowed two unique systems of land survey to develop. When surrendering its western claims, Virginia had been permitted to reserve lands between the Scioto and Little Miami rivers with which to honor bounties to the state’s war veterans. Virginia controlled development in this region, using Virginia custom for locating and surveying land. The Virginia Military District, therefore, became the only location in Ohio and the developing west where the indiscriminate claim and metes and bounds survey were employed within the public domain.\textsuperscript{19} The results were chaotic. More land litigation flowed from the District than from all other regions of Ohio combined. It is clear that the inexact boundaries and questionable corners of that system proved to be a landholder’s nightmare and a lawyer’s delight.\textsuperscript{20} Land not taken up under Virginia custom was ultimately ceded to the United States which, in turn, later granted it to Ohio for land grant college purposes.\textsuperscript{21}

As with Virginia, congress permitted Connecticut to reserve a portion of her western lands. Stretching 120 miles westward from Pennsylvania, between the forty-first parallel and Lake Erie, the Connecticut Western Reserve was developed under Connecticut custom. Connecticut set aside the Reserve’s westernmost 500,000 acres as Firelands or Sufferers’ Lands to compensate citizens for property losses sustained during the War of Independence. The state sold the remaining portion to a group of speculators collectively known as the Connecticut Land Company. In 1796 the Company sent surveyors to lay out the land on a five-mile-square township grid. Their survey, confined to lands east of the Cuyahoga because of the Greenville Treaty Line, was completed in 1797.\textsuperscript{22}

It is beyond the scope of this paper to describe the complex land allotment and sale system evolved by the Connecticut speculators. Although it did not conform to the federal system, the Connecticut plan was based on the rectangular survey and was much closer in spirit to the federal survey than was Virginia’s. Connecticut transferred political control of the Reserve to the federal government in 1800, but Western Reserve land continued to
be managed by private interests and remained outside the influence of the federal government’s land policies.23

While surveyors started work in the Western Reserve, congress was establishing the United States Military District south of the Greenville Line, west of the Seven Ranges, north of the Refugee Tract and Congress Lands, and east of the Scioto River. This land was surveyed on a five-mile-square grid in order to accommodate Continental bounty warrants which were issued in multiples of fifty acres. Speculators bought up many warrants, but few veterans actually used their warrants to settle the land. This mirrored an earlier experience with Continental bounty warrants in the Seven Ranges. Congress, therefore, ordered the unclaimed land to be surveyed into one-mile-square sections and sold on the same terms as other federal land.24

By the end of the eighteenth century, Ohio, still part of the Northwest Territory, was already a crazy quilt of land surveys, and statehood in 1803 did little to stem the diversity. Large areas of the state became available to the federal government through a series of Indian treaties. The Treaty of Ft. Industry (1805) opened the Western Reserve west of the Cuyahoga, but this land, of course, was privately developed. It also involved federal lands south of the Reserve, which were surveyed on the six-mile grid as an extension of the Ohio River Survey.25

Congress acquired most of northwestern Ohio in a series of treaties following the War of 1812. These lands were surveyed on the six-mile grid, using a numbering system that was to remain standard elsewhere in the expanding public domain.

The last of Ohio’s original surveys was made in the so-called Toledo Strip. Congress awarded this disputed land to Ohio in 1836 and followed with the Michigan Survey which laid off the 400 square miles in the six-mile grid, based on the Michigan Meridian.26

Our attention has focused on Ohio’s major original surveys, and we have identified some of the complicating factors involved. Nearly all such complications have had lasting influence. The Greenville Treaty Line is a case in point. In Holmes County, for instance, land south of the Line was located in the United States Military District and was surveyed on the five-mile grid. North of the Line the six-mile grid of the Ohio River Survey was used.27 Indian occupancy affected other surveys. Following the War of 1812, many small Indian reservations dotted northwestern Ohio, and they remained occupied while the federal survey went on around them. In time all of the reservations were vacated. Surveys were then extended through them, but special grants to various individuals interrupted the lines and the numbering system. Many persons securing land claims from the federal government were Indians or mixed bloods who had strong claims to the land or who had rendered services to the United States.28
From the beginning of the federal land system, congress had granted land to individuals for services rendered. Ebenezer Zane received three 640 acre tracts for laying out Zane’s Trace, a crude road connecting Wheeling, Virginia with Limestone, Kentucky. With a shrewd eye for the future, he located one tract on the Muskingum at the site of the future Zanesville, another on the Hocking at future Lancaster, and the third across the Scioto from Chillicothe. In a similar move, congress awarded an entire township in the Seven Ranges to Arnold Henry Dohrman for services rendered the United States while he was serving as an envoy in Lisbon, Portugal during the War of Independence. In addition to awarding land, congress, from time to time, awarded preemption rights (the right of purchase prior to public sale) to certain individuals.

Another interruption in the federal surveys occurred at military posts and fortifications. Ft. Washington was located on fifteen acres that congress had reserved out of the Symmes Purchase. By 1806 the fort had lost its importance, and Cincinnati was growing up around it, so the land was divided into town lots and streets to conform to surrounding areas of Cincinnati. In northwestern Ohio, a Twelve-mile Square surrounded old Ft. Miami and embraced the future town sites of Maumee and Perrysburg. Fremont, Ohio now covers a Two-Mile Square Reservation at the falls of the Sandusky. Both the Twelve-Mile and Two-Mile sites had been reserved to the United States by Indian treaty.

Federal land grants in Ohio were made to various groups of victims who had elicited congressional sympathy. Each of these grants was separately surveyed. Moravian Indian Grants, initially introduced in 1785 and later revised, were assigned to the Society of the United Brethren for the benefit of Christian Indians. The grant was recompense for the hideous 1782 slaughter of more than ninety Christian Indians at Gnadenhutten by American frontier roughnecks. Separate four thousand acre tracts were located along the Tuscarawas at Shoenbrunn, Gnadenhutten, and Salem. This well intentioned initiative did not succeed, and most of the land was transferred back to the United States and divided into farm lots in the 1820s.

The French settlers of Gallipolis also received victim assistance. Congress awarded 24,000 acres to them as compensation for errors and misrepresentations made by the ill-fated Scioto Company during the initial settlement of Gallipolis in 1790. Congress later added another 1,200 acres to the grant located on the Ohio downstream from Gallipolis.

Yet another group of victims was accommodated by Congress. Central Ohio’s Refugee Tract was granted to specific Canadians who had to abandon property and flee to the United States for their activities in support of the American War of Independence. Survey of the tract was delayed for many years, but eventually the Canadians received generous allotments. Unclaimed lands were later
sold on the open market. The east side of modern Columbus embraces a portion of this tract.\textsuperscript{36}

The complexity of federal land distribution in Ohio was intensified by congress' propensity to reserve certain lands for specific purposes. Foremost among these were the sections reserved for the benefit of schools. Three major original Ohio surveys—the Virginia Military District, the Connecticut Western Reserve, and the United States Military District—were undertaken without reserving school land. Lesser surveys, like the Moravian Tracts, also had to be accommodated. To provide for their needs, congress set aside school lands in various federal land districts in proportion to the size of the original survey involved. Its objective was to have one-thirty sixth of Ohio land used to support schools. Remnants of the inordinately complex pattern that evolved are with us today.\textsuperscript{37}

A unique condition, found only within the Ohio Company Purchase and the Symmes Purchase, was reservation of section 29 for support of churches. Income from these ministerial lands was to be proportionately distributed to various denominations within the regions. In 1833 congress permitted the Ohio legislature to sell ministerial lands and to invest the sale money in a permanent fund. Churches within the original surveying townships received the interest and rents until 1968 since which time, by state constitutional amendment, monies realized from ministerial lands are used for educational purposes.\textsuperscript{38}

After achieving statehood, Ohio continued to receive federal land. Internal improvements accounted for much of it. Congress gave the state over one million acres in northwestern Ohio to aid in the construction of the Miami and Erie Canal. Federal land grants involving separate surveys were also made in support of the Maumee Road connecting the Maumee River with the Western Reserve, and the Columbus and Sandusky Turnpike.\textsuperscript{39}

Other federal grants allowed Ohio to assume control of salt reservations and swamp lands.\textsuperscript{40} The federal government's last major land grant to the state occurred in the 1860s with the assignment of more than 300,000 acres to establish an agricultural and mechanical college in conformance with the 1862 Morrill Act.

In following the convoluted story of Ohio's original land surveys little has been said about the details of congressional legislation on land matters. Setting land policy was a highly politicized matter. Actual settlers, or would-be settlers, continually pressed for the chance to purchase smaller units at lower prices. They pushed for preemption rights and for a liberalization of land scrip. Speculators pursued their own agenda. An important goal was to keep the price of public land high so the speculator could sell his holdings competitively and still get a substantial price. Much of the hostility the small
farmer demonstrated toward speculators flowed from this conflict of interest.

All the major themes of land legislation and policy are found in the Ohio experience. Indeed, they were set in the national experience in the testing ground of Ohio. Public surveys versus private, special consideration to groups and individuals, six-mile grids versus five-mile grids, diverse numbering systems, and a thousand and one other concerns were all part of the trials and tribulations of setting a national land policy. Once the major features were worked out in Ohio, congress moved with much greater confidence in adopting a uniform pattern for the remainder of the public domain.


4. The 1784 ordinance is found in Commager, *Documents*, 121-23.


10. Ibid.


12. For problems with "white savages" see White, *Middle Ground*, 418-19.


17. Ibid., 166-68; 180-85.


19. See ibid., 117-42 for detailed descriptions.

20. For amount of land litigation see ibid., 30.


24. Peters, *Ohio Lands*, 251-65. Fifty-five percent of the acres claimed by land warrant were patented to twenty-two persons. [Burke], *Ohio Lands: A Short History*, 23-5.


28. Ibid., 121, 131-8.
29. For Zane grants see Peters, Ohio Lands, 203-09; for Dohrman grant, [Burke], Ohio Lands: A Short History, 31.

30. Ibid., 31-2.

31. Ibid., 32.

32. Ibid., 32-3.

33. Ibid., 28-9, Peters, Ohio Lands, 266-75.

34. Ibid., 194-201.

35. Ibid., 212-20; [Burke], Ohio Lands: A Short History, 29-30.

36. Ibid., 34-8; Peters, Ohio Lands, 371-87.

37. Ibid., 389-96; [Burke], Ohio Lands: A Short History, 38-9.

38. Ibid., 40; Peters, Ohio Lands, 341-55.

39. Ibid., 354-59; [Burke], Ohio Lands: A Short History, 40-41.

40. Ibid., 42.