

SALT, A FACTOR IN THE SETTLEMENT OF KENTUCKY

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The presence of certain minerals in Kentucky made the land attractive to early immigrants. When the first adventurer stood on the crest of the westernmost range of the Appalachian Highlands and peered over into the land of Kentucky, he, doubtless, speculated upon the presence of at least two minerals. These were salt and saltpeter, both of which were necessary to successful settlement. In order to answer the question of whether or not salt existed, the pioneers had only to follow the game trails to any of the numerous salt licks. The first important economic influence felt in Kentucky was, in all probability, the attraction which the salt licks had for game. Animals trudging overland to the licks during the centuries before the first appearance of the white man in the western country outlined a system of highways, the course of which has not, until recent years, been materially changed. A classical example was the Wilderness Road, which led from Cumberland Gap to the areas in central Kentucky where there were salt licks.

Much of Kentucky is underlain by a calciferous sandrock at the base of the Ordovician formation. Brine seeping through these sandrock fissures in many sections of Kentucky was of a high salt content. This was especially true at the Lower and the Upper Blue Licks, Big Bone Lick, Mann's Lick, and Bullitt's Lick. At these, and hundreds of smaller licks, salty brine seeped through to the surface. Here it was that herbivorous animals gathered to satisfy their desire for salt. Many sources for salt in Kentucky, however, were not so near the surface as were the licks, and it was necessary to drill rather deep wells to tap rich veins of brine. Therefore, there were two sources of salt water: the springs and the wells.¹

¹ The question may arise as to who manufactured the first salt in Kentucky. A claim has been made that Mrs. William Coomes was the first to boil salt brine. Bishop M. J. Spaulding, *Sketches of Early Catholic Missions of Kentucky* (Louisville, 1844), page 24, leaves this point in doubt. For sources of salt see Arthur M. Miller, *The Geology of Kentucky* (Frankfort, 1919), pages 220, 221.

The process by which salt was extracted from brine was by evaporating the water, leaving the saline particles adhering to the sides of the kettles, pans, or boilers. Ordinarily saltmakers estimated one bushel of salt from 400 gallons of water.² There were wells, however, which produced as much as fifty pounds of dry salt to each 100 gallons of water. This strong brine came from a basal coal measure.³ In boiling brine, much depended upon the size of the utensil. When the first pioneers came to Kentucky, they obviously did not have salt pans, but used their crude household boilers which they had brought with them. With these crude utensils the salt yields, from even the stronger brines, were poor. Soon it was discovered that the smaller the container, and the faster the evaporative process took place, the heavier the yield. Generally salt makers believed a container holding thirty-five gallons of water was more satisfactory, for it was possible to quickly evaporate this small amount of water.⁴ This statement is borne out by an advertisement appearing in the *Kentucky Gazette*, March 3, 1792, in which Charles and James Scott and George Muter offered to rent the salt works at Big Bone Lick, 104 thirty-five-gallon pans, also nine wagons and gear.

From the beginning of settlement in 1775, Kentucky pioneers began manufacturing salt to supply their limited domestic needs. Since much of the frontiersman's diet consisted of fresh meat, salt was extremely important. Not only did it make fresh meat palatable but it likewise served as an agency to preserve it; that is, to prevent bacteria from forming in meat stored for future use. In the earlier days, Kentucky pioneers found it rather difficult to create a large salt supply. At Boonesborough, for instance, the inhabitants of the fort found themselves without salt in the winter of 1777-1778. Early in January Daniel Boone and a party of thirty men went to the Lower Blue Licks to make salt, and by February 7 enough had been manufactured for the first batch to be sent back to the fort.⁵

It would be utterly impossible to estimate the amount of salt manufactured during the first ten years of settlement in Ken-

² David Dale Owen, *Fourth Report of the Geological Survey in Kentucky, 1858-1859* (Frankfort, 1861), vol. 4, page 24.

³ *Ibid.*, page 22.

⁴ By using the smaller container, salt makers were able to quickly evaporate the brine. By quick evaporation there was a minimum loss of saline particles. For a good account of the salt-making process see Marguerite Threlkel, "Mann's Lick," *The History Quarterly of The Filson Club*, July, 1927, pages 169-176.

⁵ Draper Manuscripts, S4b146 and S4b169-176, State Historical Society of Wisconsin. See, also, George W. Ranck, *Boonesborough*, The Filson Club Publications, No. 16 (1901), page 64.

tucky. After 1785, however, it is possible that salt was available in a sufficient quantity to supply the local demand. Gilbert Imlay, writing in the early nineties, said that there was no fear of a salt shortage. In 1784, General James Wilkinson, of New York State, came to Kentucky to engage in the mercantile and commission business. Within a short time the industrious New Yorker was not only engaged in the mercantile business, but he had virtually achieved a monopoly on salt.* Not only did the Wilkinson commissioners corner the supply in the Lexington area, but they likewise monopolized that of Mann's Lick and Bullitt's Lick. Writing his agent, Nathaniel Massie, from the fourth convention in Danville, on December 19, 1786, Wilkinson instructed Massie:

"I beg you to proceed with all possible dispatch to the falls. You will call by the lick, and urge the provision of the salt; and prepare some way of conveying it to the river, etc., etc. You will make the best of your way to Nashville, and there to dispose of it for cotton, beaver furs, raccoon skins, otter, etc. You must always observe to get as much cash as you can. When you have completed your sales, you will yourself move with the horses, etc., by land, and commit the other articles, with the barge, to Captain Alexander, with directions to him to proceed up to the falls; there secure the boat and property, and give me the earliest advice of his arrival, by express or otherwise.

"The goods which Captain Alexander carries down to the falls, I wish you to exchange for horses, or elegant high blooded mares, if you can get great bargains; otherwise, sell them for cash, peltry, or cotton. When you receive the salt, take care to have it measured in a proper honest way, with a spade or shovel, and no sifting, etc. One Smith is preparing to go down with two or three hundred bushels from the lower lick. Endeavor to get off before him, and if you cannot, persuade him to stay for you; but you must not wait for him a moment, as it will be your interest to arrive before him. You will remember you are going amongst a set of sharpers, and therefore must take care of yourself. Write to me by every opportunity, letting me know how you come on. Don't fail in this. God bless you and give you good luck."

In the meantime, Wilkinson received a letter from Massie outlining his plans. On December 29, 1786, Wilkinson again wrote his agent:

"I approve of your plan to go to the port with two hundred bushels of salt, and sell for cash or furs, but take no deer skins. Be sure and get as many otters as possible. Be cautious in your

* Charles R. Staples, Lexington, Kentucky. A History of Lexington, his manuscript, in preparation, pages 29, 30.

movements, guard against the savages, coming and going, and discharge your men the moment you get to the port. The only thing you have to dread is the ice. To be caught in the ice would be worse than the devil's own luck. Act with decision and dispatch in whatever you do. God bless you."⁷

The next year Wilkinson committed an act which in time was to increase the demand for salt in Kentucky. In that year this ambitious merchant journeyed from Lexington to New Orleans to arrange a trading agreement with the Spanish Governor of Louisiana.⁸ Perhaps Wilkinson did not realize that he was aiding the salt trade by this act, but this he did by opening the Southern trade. Within the next decade Kentucky had become dependent upon the Southern river trade as an outlet for its farm produce. One of the most profitable businesses from the very beginning in Kentucky was that of growing livestock. This was to be accounted for by the fact that the land was ideally suited for grazing, and that from the beginning livestock could make its way overland to market.

With the opening of the river trade southward, and a development of the salt industry, however, Kentucky's livestock trade underwent a change. Early issues of the *Kentucky Gazette* indicate the growth of a prosperous cured-pork industry. In December, 1795, James Morrison advertised for 30,000 pounds of salt-cured pork for the Southern trade. In 1800 John Jordan, Jr., was seeking several thousand pounds of pork for which he would trade salt.⁹ In October, John Bradford listed the commodities which were entered at the port of New Orleans, and bacon and salt-pork occupied an important place.¹⁰ On May 18, 1801, the *Kentucky Gazette* contained a list of commodities which were shipped from the Port of Louisville down the Ohio and Mississippi rivers. Occupying an important place in this list are 92,300 pounds of pork, 91,300 pounds of bacon, 14,860 pounds of dried beef, 2,587 pounds of butter, and 8,718 pounds of biscuit (probably a form of hardtack). All of these commodities required a large quantity of salt in preparation for the market. In later market reports, the Kentucky pork and beef trade had grown to considerable proportions.

While the Kentucky trade in other commodities was increasing in quantities, salt was becoming an important stock in trade.

⁷ Richard H. Collins, *History of Kentucky* (Covington, 1874), vol. 2, page 370.

⁸ Staples, Lexington, manuscript, page 34.

⁹ *Kentucky Gazette*, February 6, 1800.

¹⁰ *Ibid.*, October 6, 1800.

Many advertisements appeared in the *Kentucky Gazette*. Annie Christian advertised in the issue of April 8, 1788, that she had for sale, in Lincoln County, a large quantity of salt. The next month, May 24, John Clark requested four or five wagons to go to Bullitt's Lick for a quantity of salt. He promised to give persons going for this salt one third of what they brought back to Lexington. Richard Woolfolk, Danville, advertised that he was going to sell a large quantity of salt in that town on November 8, 1787, to the highest bidder for cash.¹¹ On August 30 Hugh McElwain advertised for wagons to go to Bullitt's Lick for salt. On September 6 James Wilkinson announced that he had salt to trade for tobacco. Throughout the nineties of the eighteenth century the *Gazette* contained numerous notices of salt for sale. On April 15, 1794, "Good Old Kentucky Salt" was advertised for sale in Cincinnati.¹² Moses Moore, Saltsburg, announced to the public that he would have for sale a large quantity of salt between September 22 and October 20, 1794.¹³ Moore held his salt "for gold, silver or bank bills of the genuine kind." Thomas and John Speed advertised that they had for sale "old dry salt" at Mann's Lick.¹⁴

When the pork trade was well developed, and the population had increased in Kentucky, there was a greatly increased demand for salt. This demand became of such importance that the General Assembly took steps to encourage the development of the State's salt resources. For the first twenty years of the Nineteenth Century numerous acts were passed favoring the salt makers. Even before this time the Virginia Assembly had made legal provisions for this necessary mineral resource. Perhaps the first act passed by the Kentucky Assembly was that of December 7, 1798.¹⁵ In this year the Legislature provided that owners of the Upper and the Lower Blue Licks and Salt Lick should build a fence five feet high of post and rails or stone to include all the area in which the water was of a brackish nature. This act had for its purpose the conservation of the salt resource.¹⁶

If this first act placed restrictions upon the owners of important licks, a second act, passed December 18, 1801, was generous with salt manufacturers. The preamble sets forth the

¹¹ *Kentucky Gazette*, October 27, 1787.

¹² Richard H. Collins, *op. cit.*, vol. 1, page 24.

¹³ *Kentucky Gazette*, September 27, 1794.

¹⁴ *Ibid.*, September 27, 1797.

¹⁵ *Acts, Kentucky General Assembly*, December 7, 1798, page 67.

¹⁶ *Ibid.*, December 4, 1800, page 32.

public feeling of the importance of this mineral: "Whereas it is of the utmost importance to the good people of this Commonwealth, that the owners of saltlicks, or occupiers thereof, should be enabled to manufacture salt with as much ease as possible, and thereby have it in their power to sell it on good terms." This act permitted manufacturers the exceedingly liberal privilege of conveying brine to a wood supply over land held by others by right of *eminent domain*. Not only were the salt makers permitted to convey brine across land owned by others, but they were likewise permitted to secure the necessary amount of wood for boiling brine at the most convenient point.¹⁷

At the general session of the Assembly in 1810 an act was passed requiring that the Knox County officials be instructed to build a road from the salt works on Goose Creek to Hale's place on the Wilderness Road. In this act mention is made of several points in Clay County where salt was being manufactured. Two of these points were Goose Creek Works and Langford's Lick.¹⁸

The next year the general assembly established an interesting precedent. John, Francis, and Richard Slavey were granted, in 1811, the privilege of claiming 1,000 acres of public lands in Wayne County for the purpose of developing salt works. These petitioners had discovered the presence of salt springs and had assured the Legislature that, with proper handling, these sources could be made to yield a large amount of salt. These lands, located on Bear Creek, were not to be assigned permanently to the Slavey brothers, their heirs and assignees, until they had proved to the county clerk that they had manufactured salt to the amount of more than 1,000 bushels. These claimants, however, were enjoined by this same act never to make any assignments of the property which would, in any way, create a salt monopoly within Kentucky.¹⁹ If these petitioners ever disposed of the land in such a way as to injure the salt supply, the State of Kentucky reserved the right to reclaim the property.²⁰

The classic example of State encouragement of the salt industry is to be found in the general blanket grant of 1813. On February 2, 1813, the General Assembly passed a law which permitted persons interested in salt manufacturing to apply to county surveyors to lay out such plots as were desired up to 1,000

¹⁷ *Ibid.*, December 18, 1801, page 93.

¹⁸ *Ibid.*, January 31, 1810, page 134.

¹⁹ *Ibid.*, January 31, 1811, page 113.

²⁰ *Ibid.*, January 31, 1811, page 113.

acres. When the prospective purchasers had secured a registered survey, they were permitted to buy land at the rate of \$100.00 per 100 acres for first rate, \$50.00 for second rate, and \$20.00 for third rate lands. Upon purchase of this land it was necessary for the registrants to make oath before a justice of the peace that it would be used strictly for the development of the salt industry.²¹ This law was changed in 1815 to permit claimants to receive quietuses from the State Land Office, so long as the subscriber promised to use the land for salt manufacture.²²

James Crawford, Solomon Tabor, and William Stewart of Barren County petitioned the Legislature in January, 1815, for a grant of land for the purpose of developing salt wells. In their petition these men stated that they had discovered springs on public lands, and that they had tested the water with flattering results. The legislature agreed to make a grant not exceeding 1,000 acres of land at \$20.00 per hundred acres. Provisions were made in this act, as in all previous grants, that plots surveyed should not exceed more than one-third in length the breadth of the plot, thus preventing the registry of lands for a long distance along salt-bearing streams. Crawford, Tabor, and Stewart were required to make oath that they would supply salt to the public, and that they would not themselves, or permit their assignees, to create a salt monopoly.²³ Again the prospective claimants were required to present proof that they had manufactured 1,000 bushels of salt.

This same year, and five days later, the Legislature again considered the salt business. This time an act was passed making it a felony for any person to interfere with the manufacture of salt. If an individual prevented the piping, or transportation of brine, to cisterns or storage tanks, or otherwise interfered with the manufacture of salt, he was to be sentenced to the penitentiary for a period of from one to three years. Likewise, if an individual filled up a well or drained a spring which yielded brine, he was to be sentenced to the penitentiary for the same term as above. This provision did not except persons who owned the lands. If a slave violated either of these provisions, he was to receive, in public, thirty-nine lashes upon his bare back.²⁴

In 1819, as industry in Kentucky expanded, the Legislature passed a law in which it provided that all of the salt resources should be developed, but the Assembly wished this development to be made by private enterprise. So anxious was the State to have private companies develop the salt resources that generous

²¹ *Acts*, February 2, 1813, page 78.

²² *Ibid.*, January 26, 1815, page 271.

²³ *Ibid.*, January 3, 1815, page 320.

²⁴ *Ibid.*, January 8, 1815, page 269.

grants of land were made available on most liberal terms.²⁵ One year later provisions were made by the Assembly to permit salt boilers to commandeer wood wherever convenient, and to build roads through private property to salt works, the only restrictions being that such roads should not pass through barns, dwellings, smokehouses, or peach and apple orchards. Not only did the Legislature permit this privilege, but it promised aid in building roads.²⁶

When Kentucky's salt industry had expanded sufficiently to permit regulation, the Legislature passed two laws in the first months of 1827 to appoint salt inspectors. Counties in which salt works were located were instructed to appoint inspectors to watch after the manufacture of salt, and to grade it according to quality. For instance, there should be three grades: No. 1, No. 2, and "R" (rejected). To inspect the salt manufactured in the counties, the inspectors were instructed to bore a hole with a long auger all the way through the barrels from top to bottom to make sure that the contents of the middle of the barrels were not dirt or inferior salt.²⁷

The writer does not make any pretense at locating all of the licks in the State, but he can list some of the more prominent ones. Perhaps the first lick to attract attention in Kentucky was the Big Bone Lick, in what is now Boone County. A French explorer described the Big Bone Lick as one of the points on his journey in 1739. In 1751 Christopher Gist visited this lick.²⁸ Later the Upper and Lower Blue Licks became well known, and when the first surveyors came out to Kentucky, the McAfee Brothers and James Drennon discovered Drennon's Lick.²⁹

Near the mouth of the Salt River, two salt licks were discovered and these were known as Mann's and Bullitt's licks, near the present Jefferson-Bullitt County line. Salt from these sources was, perhaps, of the best quality for sale in early Kentucky. No one knows positively when these important licks were first discovered. In 1788, a party from Louisville, under the leadership of Henry Crist and Solomon Spears, went to the Mud Garrison, in what is now Bullitt County, to make salt. This area was well known, for when this party arrived, they found a fortification and several salt-makers already on the ground.³⁰

There were numerous licks in Clay County which supplied an abundance of salt; among them was the Goose Creek Salt

²⁵ *Ibid.*, January 25, 1819.

²⁶ *Ibid.*, February 7, 1820, pages 890-892.

²⁷ *Ibid.*, January 24, 1827, page 124.

²⁸ Miller, *op. cit.*, page 220. Also, J. Stoddard Johnston, *First Explorations of Kentucky*, The Filson Club Publications, No. 13 (1898).

²⁹ Collins, *op. cit.*, vol. 1, page 17.

³⁰ *Ibid.*, 1, pages 100-103. Also, Threlkel, *op. cit.*, *passim*, pages 169-176.

Works.²¹ By 1846 more than 200,000 pounds of salt were being produced annually. Salt-makers of this area distributed their product over a large area. Even the communities of eastern Tennessee were largely dependent upon this source for their salt supply.²²

Other salt works were located in Wayne, Whitley, Owen, Perry, Allen, Barren, Mason, Bath, Pulaski, Carter, Jackson, Letcher, Pike, Nelson, and Bourbon counties.²³

Salt-well drilling was a prominent profession. In some cases shallow wells ranging from ten to fifty feet were dug around the salt licks and a large flow of brackish water was made available. In other instances, however, it was necessary to dig much deeper wells, even up to 200 feet, before water flowing from the calciferous strata was obtainable. One of the most colorful salt well diggers was John Robert Shaw, the famous "jack-of-all-trades" and author of *A Narrative of the Life and Travels of John Robert Shaw, the Well-Digger*, published in 1807 and reprinted in 1930. Shaw, in 1803, advertised in the *Kentucky Gazette* that he,²⁴

John Robert Shaw, who now excells,
In blowing rocks and digging wells,
Can water find by the new art
As well the fresh so well the salt.

Since conjurers became so wise,
In telling where salt water lies;
In hopes I shall not forsook,
I've try'd the art of Mr. Cook.

And to my friends I do declare,
A witch I never was before;
Before my master doth get rich
Come unto me the art I'll teach.

No stipend of my friends I take,
I'll show them all for friendships sake;
Then all that wish to dig salt wells
May easy learn that Shaw excells.

²¹ Book of accounts, Goose Creek Salt Works, 1806-1810, 382 pages, original in The Filson Club Library. See, also, John F. Smith, "The Salt-Making Industry of Clay County," *The History Quarterly of The Filson Club*, April, 1927, pages 134-141.

²² "Letter from Thomas Preston to B. R. Johnston, December 11, 1848," included in a volume of pamphlets containing communications between Dr. Alexander McCall and Thomas Preston concerning the salt and plaster trade. Tennessee State Library, Nashville. Also, *Knoxville Register*, July 4, 1831.

²³ *Kentucky Gazette*, August 16, 1788.

²⁴ *Ibid.*, December 6, 1803.

In 1819, Martin Beatty of Abingdon, Virginia, bored a well "for the benefit of sault" in the valley of the South Fork of the Cumberland River in Wayne, now McCreary County.²⁵ Beatty was sadly disappointed, however, for he tapped a vein of greasy substance which, to him, had no practical use. Perhaps this accounts for its being called devil's tar, or perhaps it was so called because certain women who were raising geese for feathers, found their feathers covered with the black tar-like product of Beatty's well. Ten years later a salt well digger in Burkesville is said to have gone to Renox Creek "to drill for salt or hell." Unfortunately this driller struck oil, and, in the process of overflowing into the Cumberland River, it caught on fire, and for forty miles downstream this fluid from the "bottomless pit" was burning.²⁶

Later a salt well was sunk at Cloverport, and not only did the drillers strike a good source of brine but likewise gas, and for a long time the gas was used to evaporate the brine, with the result that Cloverport had a thriving salt industry.²⁷

As a factor in industry, the presence of salt contributed first of all to the actual settlement of Kentucky. Had it not been for the presence of the licks, and the availability of rich brine at shallow depths, many a settlement, doubtless, would have been delayed for several years. Under existing conditions on the frontier it would have been impossible to transport this important mineral from east of the mountains. Likewise, immigrants into the Kentucky wilderness would have experienced several starving winters had it not been for a reasonable supply of salt. The preservation of meats would have been impossible, and fresh meats would not have been palatable.

When the trade to New Orleans was established in the early eighties of the Eighteenth Century, salt-pork and salt-bacon were prominent on the list of exports. Salt meats were the only ones which would stand the long and arduous journey to the Southern market. After the War of 1812 the population of the Southern country increased rapidly, and as it increased, heavy demands were made on Kentucky butchers for cured meat. In 1830 the butchering industry yielded \$1,900,000.00; in 1840 it yielded \$2,310,533.00; in 1850 it yielded \$6,462,598.00. As this industry increased, heavier demands were made for salt. Kentucky,

²⁵ Miller, *op. cit.*, page 287.

²⁶ *Niles' Weekly Register* (Baltimore), vol. 13, page 4.

²⁷ Miller, *op. cit.*, page 292.

however, did not keep up with this demand in its salt manufactures, for during the latter two decades before the Civil War the salt supply decreased, in 1860, from 246,500 to 69,655 bushels.³⁸ However, during the war of 1861-1865 the Kentucky salt industry showed signs of revival.

Not only did the trade in cured meats and in the manufacture of salt itself create a large and lucrative industry but other influences were exerted upon early Kentucky industries. The highway system was outlined, first, to an extent that immigrants coming to Kentucky were not forced to mark a highway into the central region, for this was already done by salt-hungry animals and pelt-seeking Indians. Then, when new sources of brine were discovered, the General Assembly passed laws providing for the opening of new roads to facilitate the transportation of salt to local markets. As these roads were opened, the adjacent lands were made better available to settlers, and within a short time not only the salt trade thrived but likewise the trade in livestock and agricultural products.

³⁸ *Compendium of the Seventh Census*, 1850, table 203, page 183. Also, *ibid.*, 1860, table 30, page 188.