

YELLOW FEVER WORKSHEET

Station 2: Savannah Yellow Fever History

Read the selected passages from "A History of the City Government of Savannah, Ga. from 1790 to 1901," compiled by Thomas Gamble, Jr.

1. *Why were the number of "strangers" reported in the 1818 and 1820 censuses?*

2. *How many people died by October 1820?*

3. *How does the introduction of dry culture reflect a changing understanding of what caused diseases such as Yellow Fever?*

4. *Did the implementation of dry culture reduce deaths?*



THOMAS GAMBLE, JR., SECRETARY TO MAYOR.

A HISTORY
OF THE
CITY GOVERNMENT
OF
Savannah, Ga.,
FROM
1790 to 1901.

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Compiled from Official Records by

THOMAS GAMBLE, Jr., *comp.*
Secretary to the Mayor,

Under Direction of the City Council,

1900.

30790

condition of uncommon healthfulness fortunately continued for several years. Smallpox in 1811 caused some apprehension, but amounted to little. A health committee of five aldermen had charge of the sanitary conditions. There was the usual amount of illness, especially in the fall months, described in the minutes frequently as "the sickly season." In the fall of 1812 it was ordered by Council that no more badges should be granted to negro wenches to sell vegetables, as "at the sickly season of the year numbers suffer for the want of nurses which are not obtainable for any consideration for this reason." In order to better clean the city it was divided into two districts, and scavengers were appointed for each. This continued until 1815, when the old system of one scavenger was restored. The summer and fall of the next year (1816) proved unusually unhealthful, so much so that on December 2 Council adopted a resolution stating that "the great and unusual mortality of the latter part of the summer and fall may have created an opinion unfavorable to the health of the city, and uniting in the general opinion that it was occasioned more by the operation of extraneous and adventitious causes than the necessary influence of the climate, the Board of Aldermen, anxious to remove any causes which may tend to lessen the growing importance of the city, called on the medical society to furnish the City Council with such facts and observations embracing the comparative mortality that has been remarked in their practice, that they may be enabled to suggest such views to the Legislature as may tend to enhance the standing of the faculty and benefit the city generally." The next month (January 22, 1817), Council was informed of the presence of small pox in the city and the Mayor was authorized to incur all necessary expense to prevent its spread and to call on the Governor for reimbursement of similar funds expended the previous year. On March 8 Health Officer Proctor died. At this time there were twenty cases of small pox in the hospital. The expenses of the small pox had become so burdensome that they could not be longer endured in the cramped financial condition of the City, and Council stated that if not relieved by the State the City must abandon its restrictions and leave the small pox to individual precaution and prudence. The Mayor was directed to lay the facts before the Governor and ascertain what relief the City could expect in the repayment of expenses incurred in controlling and stamping out the disease. On March 29, at a special meeting, the Mayor presented a letter from Acting Governor Rabun. Council then adopted a resolution to the effect that it was unable to pay the large and increasing expenditures on account of the small pox, and as the Governor had written that "the Executive interference was painful and expensive," the Board was constrained to cease any further exertions to prevent the small pox from being introduced in the city. In June, 1818,

the Georgia Medical Society suggested to Council the propriety of establishing a dispensary. On August 10, 1818, a committee of Council reported in favor of the establishment of a City Dispensary, and offered the Charleston Dispensary as a model. The expenses of that dispensary were placed at \$1,000 a year. The object was to give medical advice as well as furnish the needed drugs. It was suggested that a physician be nominated monthly by the Medical Society for this purpose. The committee was ordered to draft an ordinance to this effect, which was passed September 21.

Under this ordinance six aldermen were to be appointed as trustees of the Savannah Dispensary. They were to receive applications for medical and surgical relief, inquire into the condition and circumstances of the applicants, and grant or refuse relief. An apothecary was to be elected by Council, to be paid according to the regular rates. Joseph C. Habersham was elected to this position. Two physicians were to be nominated by the trustees each month from the members of the Georgia Medical Society to attend the poor sick without compensation. On February 2, 1819, this was amended so that each member of the Medical Society was considered a permanent physician to the Dispensary, with authority to prescribe prescriptions to be filled there at the public expense, the monthly appointment of two physicians to the poor being continued. On August 23, 1819, the entire system was abolished.

On September 13, 1819, the Mayor was authorized to employ one or more physicians to attend all sick persons. A committee of three, Aldermen Waring, White and Henry, was then appointed to report a plan for the establishment of a City Dispensary. At a later meeting both the matter of a dispensary and physicians for the poor were laid on the table indefinitely on the ground that an association of citizens was being formed to establish the Chatham Dispensary for such purposes. Both meritorious plans were allowed to die. It was not until the 30's that the city made definite arrangements to furnish the poor with medicines. Bids were then called for from pharmacists to fill prescriptions and a contract was entered into.

It was not until September, 1818, that the Georgia Medical Society replied officially to the City's request for an expression of views on the heavy mortality of the fall months. It then reported a resolution it had adopted to Council, that "we are of the opinion that a residence of three successive years will constitute a period for the constitution to be accustomed to the climate and that a period of one year and less than three years for the constitution to be unaccustomed to the climate, and that a period of five years with interrupted residence will be necessary for the constitution to be accustomed to the climate." It was largely as a result of this that the

Legislature, at the request of the City, passed the act previously referred to, in December, 1819, prohibiting the introduction into Savannah of passengers who were aliens during the months of July, August, September and October, and imposing heavy fines on any captains violating the law. The next year brought the yellow fever epidemic of 1820, which devastated the city and did incalculable damage to its business interests. On August 17, of that year, Council by resolution added seven citizens to the health committee of five aldermen. This board was directed to sit daily during the sickly season, and the Medical Society was asked to depute two physicians in rotation to associate with them.

In September, 1818, a census of the city showed 2,564 white inhabitants, of whom 205 were strangers, and only twelve persons ill in the city. A census taken in October, 1820, when the yellow fever had about died out, showed a white population of 693 males, 449 females and 352 children, a total of 1,494, of whom 120 were transients. The number of unoccupied buildings was 375. On January 17, 1821, Alderman Waring presented an elaborate paper to Council discussing the epidemic and its causes. Said he: "It appears that the causes of fever have been: 1st. A general epidemic condition of the atmosphere, of extraordinary virulence, either proved to exist, or produced, by an uncommon deficiency of the electric fluid; 2d. The early establishment of that condition of the atmosphere, by the reduction of the winter of 1819-20, to the temperature of spring, and the reduction of spring to the heat of summer; thus bringing upon us in the spring the usual evils of summer; in the summer a combination of these evils, with the usual evils of that season, and, in the fall, an aggregation of the evils which are usually incident to it, with this extraordinary combination of those which preceded them. 3d. The prevalence of easterly winds which has been predominant, and uncommonly injurious, in consequence of the general abundance of moisture and miasmata. 4th. The growth of the city within a few years, and the rapid increase of its population, thus producing a source of internal putridity, and incorporating it with the soil. 5th. The unnecessary luxuriance of the trees, by the shade and protection which they afford to dews and fogs, and moisture of the atmosphere after rain; 6th. The great number of small wooden houses unpainted, and in a complete state of putrescence. 7th. Uncovered vaults and cellars, the consequence of the fire. 8th. The remarkable number of foreigners and persons unaccustomed to the climate, producing not an aggravation of the cause of the disease, but of its general grade and character. 9th. The high position of the city, on the border of extensive marsh grounds, thus attracting and concentrating upon itself their products of unwholesome vapor and miasmata. All these causes together give a compound origin to the disease, which is internal and external."

The number of deaths in four months was 605 males and 191 females, of which 516 were from the fever. In a later report on autumnal diseases the proportion of mortality in 1820 was given as one to 5 1-10. Chief among the sufferers were the Irish immigrants, who had arrived in the early winter of 1819, in a destitute condition and settled in Washington ward. Council then appropriated money for their temporary relief. Owing to their poverty and unacclimated state, the mortality among them was heavy. On October 1 the city was visited by a great storm which, while it did considerable damage, apparently marked the close of the epidemic. In January, of the same year (1820) occurred one of the greatest fires the United States had up to that time known. Four hundred and sixty-three tenements, besides out buildings, were burned. A map drawn by City Surveyor McKinnon, a copy of which now hangs in the Council Chamber, shows that the fire covered the section from the river front to Broughton street, and from Jefferson to Drayton, with the block from Bay to Bryan and Abercorn to Drayton. Some few buildings outside of this territory were also burned. Inside of these lines but a few brick buildings were left standing. Council met on the 12th and ordered all buildings and boats searched for stolen goods, and a committee was appointed to report places for temporary accommodation of the homeless.

One thousand dollars was at once appropriated by Council to meet the immediate necessities of the sufferers. Dr. J. E. White tendered his services as a solicitor of contributions. The Mayor was directed by Council to give him proper credentials, and \$500 was appropriated to buy horses for his journey, he contemplating visiting almost every State and all the principal cities and towns. On February 7, however, this authority to Dr. White was rescinded, the citizens evidently being averse to such a method of soliciting relief. An investigation by Council showed that a large quantity of gunpowder in the stores of Moses Cleland, James H. Fraser and S. J. & J. Bryan had exploded early in the course of the fire and paralyzed the efforts of the citizens to stay the progress of the flames. This powder had been kept in the stores in direct violation of the laws and Council publicly and severely condemned the merchants, charging them with being responsible for much loss of property. Alderman Harris, who owned the barracks at the time, tendered their use for the homeless. An appeal was at once made to the Legislature to appropriate the entire county tax for 1820 and 1821 to relieve the distress, and the Governor was petitioned to call the Legislature in extra session to change the laws on the subject of issuing notes so as to permit the City to form an institution bottomed on the faith and funds of the City to advance money to those inclined to build fireproof stores or houses covered by mortgages in favor of the

a special committee of Council made a voluminous report reviewing the work done toward dry culture up to that date. The report stated that "prior to the introduction of wet culture on Hutchinson's island and the low lands the city enjoyed a remarkable exemption from the usual diseases of this climate, so remarkable that the inhabitants of Charleston sought a refuge here from the unhealthfulness of their own city during the autumnal months. Previous to that time the character of our autumnal diseases was comparatively mild and in most cases controlled with considerable certainty. It may be that the mode of treating our fevers adopted within the last forty years," the report continued, "has added to their fatality, but not sufficiently to explain the difference in the mortality which has occurred since. Convinced of the great importance to the health of the city of dry culture, the citizens in the spring of 1817, at a public meeting, almost unanimously resolved that dry culture should be adopted and Council appropriated \$8,751.96 to start the work. Unfortunately too much was anticipated from dry culture, more than every agent combined could probably have produced, and because our wildest dreams have not been realized some of us in abandoning hopes which never could have been rationally entertained, have abandoned also calculations made upon the most positive data and authorized by the most conclusive evidence."

On March 24, 1817, an ordinance was passed to improve the health of the city, to carry into effect the desires of the citizens at the town meeting referred to. Under this ordinance the Mayor was empowered to sign and execute such contracts with the proprietors of the low lands in front and on the eastern and western extremities of the city as he and the commissioners thereafter to be appointed might approve, and the condition of the contract to be a perpetual change of the existing wet to a dry culture, with such penalties and reservations as to occasional irrigation and overflowing of the lands, as they might agree to. The ordinance further provided that \$70,000 should be appropriated for the purpose of complying with the payments which might be agreed on in these contracts. Stock, to be called the "City land stock," and payable in certificates or scrip, signed by the Mayor and city treasurer, was to be issued. The faith of the City and the public property were pledged as security for the redemption of the stock within ten years from the annual revenues and taxes. The rent of the City lots was specifically set apart and appropriated to pay the interest on the scrip semi-annually at seven per cent. and to extinguish the principal. By an amendment on May 17, 1819, \$15,000 additional was appropriated for the payment of dry culture contracts.

John Bolton and A. Cuthbert were the first commissioners of health and dry culture, appointed in January, 1818, for one year, with

an appropriation made by Council of \$12,000 to carry out contracts with proprietors of rice fields who had them in fit condition for dry culture. Adam Cope succeeded John Bolton on July 16, 1819. The first commissioners made a number of contracts for dry culture, including Joseph Stiles, 222 acres; James Bilbo, 123 1-2 acres; estate Gen. James Jackson, 86 acres; William C. Wayne, 110 acres; William Mein, Hutchinson's island, 600 acres; Dr. N. S. Bayard, Hutchinson's island, 205 acres; Ebenezer Jackson, Hutchinson's island, 143 acres. The half of Fig island owned by the City was ordered sold subject to dry culture. R. G. Wallace was the purchaser for \$603. In the fall of 1819 the commissioners were given power to appoint an agent with salary to inspect all lands for which dry culture had been contracted. The distressed condition of the city financially after the yellow fever and fire of 1820 led a special committee of Council on February 5, 1821, to recommend a revocation of the dry culture contracts if the people concurred. The committee claimed that little if any sanitary advantages had resulted from the dry culture system as conducted and that it was costly at a period when the City's revenues were exhausted and the people exorbitantly taxed. The commissioners of dry culture, though, did not concur in this and when referred to the people they voted to sustain dry culture by 279 to 210. Richard Rowell was elected inspector of dry culture. Dissatisfaction with the results of the system continued and early in 1822 a committee, part of whose report has been given, was appointed to thoroughly investigate the question. Under the original plan one-third of the board of dry culture was to have been elected annually, guarding against an abatement of interest and zeal. This rule had been neglected, and the committee pointed out that as a result the board had virtually expired. Twelve months had intervened between its meetings. The committee reported that there was too much complication in the machinery for carrying the dry culture system into operation, and a lack of efficient and harmonious co-operation. It accordingly advocated dispensing with the commissioners and appointing a special committee of Council with the full authority and duties of the commissioners. The committee used extremely severe language against the planters who had defaulted in engagements with the City. For some years the City was engaged in a wrangle with Mr. Joseph Stiles over his failure to fulfill his contract, and the courts were finally resorted to. Trouble, but not so great, was met in enforcing other contracts. On May 23, 1822, the Mayor was empowered to appoint a dry culture committee of Council and the old board of commissioners passed out of existence, although it was some time before its accounts were audited and the heavy bonds under which they had been placed were cancelled. On January 9, 1823, Council expressed full faith in

the dry culture system for improving the health of the city and refused to consent to the liberation of any contracts entered into for that purpose. In August of this year Dr. Screven, who had recently returned from a trip through the south of Europe, sent a communication to Council relative to dry culture and its effects there. This report, the committee of Council to whom it was referred, said, "was well calculated to set the question of the utility of a system of dry culture permanently at rest." On January 29, 1824, the committee on dry culture made a report beginning: "Six years have passed away under the operation of the dry culture system. Imperfectly as that system has been enforced it has given evidence the most conclusive of a favorable influence upon the health of Savannah." The committee called on Council to persevere in rigidly enforcing and extending the dry culture contracts. In this report it alluded to the improved appearance of the people of Savannah, as "indicated by their countenances during the summer and fall for the last three years." "It is evidence," the committee said, "of a more vigorous health than before prevailed even among those of our own inhabitants who escaped positive disease. Nothing formerly was better calculated to impress upon the mind of a stranger arriving here in November the melancholy character of our climate than the bleached and sallow faces of our inhabitants. The remark is now general that of late the faces are quite as indicative of health as those of persons residing in cities to the North reputed much more salubrious." Added to this, according to the report, was "greater corporeal vigor." The committee presented a table of the proportion of persons dying of autumnal diseases to the population as follows:

Under wet culture: 1815, one in 15; 1816, one in 18; 1817, one in 9 2-3.

Under dry culture: 1818, one in 62 3-4; 1819, one in 13; 1820, one in 5 1-10; 1821, one in 37; 1822, one in 33 4-5; 1823, one in 32 1-4.

In 1819 many whites arrived in the months of July, August and September and fell victims to the climate. In 1820 the ravages of yellow fever were responsible for the heavy mortality. During the first period of three years under wet culture, the committee pointed out, the average of deaths from autumnal diseases was one in 11, while the average for the first period under dry culture was one in 27, and the average for the second three years under dry culture was one to every 35. The introduction of white laborers unaccustomed to the climate and ignorant of its dangers, the committee stated, was responsible for much of the mortality in the fall. On an average 700 arrived during the summer months, making up one-fifth of the white population. Up to this time there had been expended on dry culture \$38,800. In October, 1824, the representatives in the Legis-

lature were requested by Council to have a bill passed to prevent rice culture, (wet) within two miles of the city limits. A bill was put through the Legislature and on January 26, 1826, an ordinance was passed prohibiting rice culture within two miles of the city. In 1827 the committee on dry culture reported that in 1824 there had been "fewer cases of fever and less mortality than ever before known in Savannah, 124 less than in 1823. In 1825 there was still greater improvement in the health of the city. It was the most healthful year Savannah had experienced since the deaths had been registered. The mortality in 1826 was twenty less than in 1824, and only nineteen deaths were from fever." The city was less healthful in 1826, owing to the influenza and an epidemic of rash or breakbone fever which attacked nine-tenths of the population. This fever prevailed throughout the lower section of the State. There were fifty deaths by fever, but forty of them were non-residents, chiefly Irishmen.

"The atmosphere has maintained a character of clearness, dryness and elasticity which it has only acquired since the introduction of the dry culture system." The following table of mortality and the proportion to population, estimated during all these years at 5,000, was given:

Year.	Deaths.	Proportion.
1817	463	1 in 10.80
1818	233	1 in 21.45
1819	516	1 in 9.69
1820	820	1 in 6.09
1821	380	1 in 13.15
1822	292	1 in 17.12
1823	270	1 in 18.51
1824	146	1 in 34.24
1825	126	1 in 39.68
1826	238	1 in 21.00

New difficulties arose with some planters who had contracted for dry culture. The planters claimed the right to plant rice under dry culture. The Council denied this under the contracts and the recorder held in a long opinion in 1828 that parties under dry culture contracts were precluded from planting rice by the dry culture system, as it was expressly provided in the contracts that rice culture should not be carried on.

This opinion was evidently not sustained in the courts, as the Legislature was soon appealed to to pass a law prohibiting the cultivation of rice on dry culture lands, which was done. In 1829 a report to Council showed that dry culture contracts had been entered into with land owners aggregating \$72,537.18. Scrip had only been issued to the value of \$38,800, the balance being paid in cash. The law restricting wet culture to beyond one mile of the city limits having