

**THE MIKE WEAVER
DRAIN TILE MUSEUM**

**located in
THE HOME OF
JOHN JOHNSTON**

The Johnston House is located East of Geneva, New York, on Route 96A at the junction with the East Lake Road, 1&1/2 miles south of Routes 5 & 20, New York State Thruway Exit 41 or 42.

The beginning of farm drainage is obscure. Cato wrote of it in 200 B.C. It was accomplished by laying down brush, straw, poles, stones, boards and tile. Pliny in the first century A.D. suggested the use of house (roof) tiles in drainage. These evolved into the horseshoe shape and were known by that name. Some of the horseshoe tiles were laid on boards and some on ceramic soleplates. Most of the early horseshoe tiles were made around a pole. Those with the soleplate attached were made after the coming of the extrusion machine in 1843 in England. The inside and outside had a myriad of shapes after that time. Individual tile-makers had a credible sales pitch for the shapes of tiles.

There is evidence that drain tiles were in use in New Jersey in 1834. The practice of tile drainage did not become general in the United States until the middle 1800's. John Johnston first tried the practice on his farm in 1838. His soils were mostly Ovid and Cazenovia on 3% to 8% slopes. These are deep and moderately deep, somewhat poorly to well-drained soils.

Isaac Philips Roberts, a native of Seneca County, wrote in "Autobiography of a Farm Boy," that "The following year we made a visit to my old home in New York and I brought back with me two drain tiles, hoping to get some brick-maker interested in making them. It is probable that these were the first drain tiles carried beyond the Mississippi River." This visit by Roberts to his former home in Seneca County must have been between 1864 and 1869.

The home of John Johnston, built in 1822, houses the drain tile collection of Marion "Mike" Weaver and his collection of documentary reference material on drain tile. This collection consists of 350 tile; of different styles dating from 100 B.C. to the present day.

The documentary material is available for research.

The house contains:

- Introductory Room on Agricultural Draining
- Research Room
- Tile Display Room
- Johnston Room with many original furnishings.

OPEN MAY 1 to OCTOBER 31

by appointment only

call or visit
ROSE HILL MANSION
for admission

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or

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Marion "Mike" Weaver was born in Indiana in 1911. The family moved to Hammondsport in 1915. He graduated from Tri-State University in 1935. He became an engineer in USDA Soil Conservation Service starting in 1936 and retired in 1966. Consulting in drainage, irrigation, and, dam building was his occupation for the next 20 years.

The tile collection started in 1950 by finding -an odd-looking tile and taking it home. In a later year it became apparent that the tiles should be preserved. Learning about the old tile led to writing and publishing the book, History of Tile Drainage, in 1964.

The collection grew to be over 500 pieces. A small part of the collection was placed in the Henry Ford Museum, Dearborn, Michigan. A smaller collection is at the Waterloo Museum at Waterloo, NY.

Many drainage people found ancient tile and added them to the Weaver collection. Letters, papers, pamphlets and books finally became part of it. These will be available to serious researchers at the Johnston House.

Mike was:

- Registered CPESC Specialist
- Fellow, Charter, and Life Member SCSA (Soil Conservation Society of America now the Soil and Water Conservation Society)
- 8th Inductee, Virgil Overholt Drainage Hall of Fame

John Johnston was born in Knockknolling, Dalrys, Dumfriesshire, Eglan, April 11, 1791. He came to the United States, landing at New York City in April of 1821. His first land purchase was 112 acres in Seneca County where he built his house, which he called "Viewfields;" in 1822. Several parcels were added later to make a total farm of 320 acres.

The mainstay of Johnston's farming was sheep. He bought land in the Town of Italy, Yates County in 1837. This holding, which came to 407 acres, was a place to pasture as many as 1,000 sheep. In the fall, the sheep were driven to Viewfields, a distance of 37 miles.

Johnston sent to Scotland for two pattern tiles in 1835. He took these to Benjamin E Whartenby, a crockmaker, at Waterloo, NY. Whartenby made and Johnston installed 3,000 tiles in 1838. The results were such that he had 72 miles of tile drains on his 320 acre farm when he retired. He became known as "The Father of Tile Drainage in the United States."

Johnston made field trails of tile drains and other farm practices which were new at that time. A prolific writer for newspapers and magazines, he traveled to farms to give advice on drainage. He was President of the Seneca County Agricultural Society in 1844. He forwarded the cause of tile drainage at every opportunity.

Johnston died November 24, 1880 in his ninetieth year. A sheaf of wheat was the only floral piece on his coffin.

The American Society of Agricultural Engineers sponsored a boulder to be erected at the Johnston House in 1935. It was to honor John Johnston's efforts in spreading the knowledge of tile draining. '

Benjamin R Whartenby made 3,000 tiles for Johnston in 1838. In 1848, he made 180,000 tiles and in 1849, 840,000 riles. There were 10 factories in the Waterloo area by 1871 and by 1882 there were 1140 factories in the United States.

Robert Swan, a New York City boy, came to Johnston's farm as an apprentice in 1848. He married one of Johnston's daughters in 1850 and bought the farm adjacent to Johnston's. He thoroughly drained the farm. He started in 1851 on a small scale and in 1852 he laid 17 miles and 56 rods at a depth of 2 ½ to 3 feet. The work was done by Irish labor. It was completed between the month of August and December 1, 1852. There were no excavating machines at that time. The 91,000 feet of trench and backfill was done by hand-labor in less than 100 days.

John Delafield, a banker from New York City, bought a farm adjoining John Johnston 's. He was President of the Seneca County Agricultural Society in 1848. A tile-making machine was invented in England in 1846. The Seneca County Society caused such a machine to be imported during Delafield's term in office. It was placed with Benjamin E Whartenby. That machine greatly increased the amount of tile that Whartenby could make.