### MILL STONES

Constructing the grist mill within two years of settlement indicates the high priority Moravians placed on having their own milling operation.

A millstone is actually one of a pair of large circular stones stacked on top of each other. Grain is poured through a hole in the upper millstone and then ground between the two. The millstones never touch. The space between the stones regulate how fine the grain is ground.

When new, the runner stone (the revolving one on top) could be a foot thick, weighing more than a ton. The bed stone (the stationary one on the bottom) would be 15 inches thick. A mill stone made of North Carolina granite could last anywhere from 20 to 25 years.

Mill stones were also used by rolling them edge-ways to crush tree bark into a powder that was used to tan leather. They were also used to press flax seeds into linseed oil, which was used as camp fuel, a wood preservative, and for medicine.

## WETLANDS

Wetlands are natural areas that hold water all or part of the year. Wetlands absorb and filter pollutants that could degrade lakes and streams and provide flood control. Because they have both land and aquatic characteristics, wetlands are some of the most diverse ecosystems on Earth.

Depending on vegetation, soil type, water supply, and water chemistry found in and around them, wetlands are generally classified as marshes, swamps, peatland bogs, or mangroves.

Wetland conditions favor a variety of plants, shrubs, and trees and provide a critical habitat for a large number of mammals, reptiles, amphibians, and insects. Many live in wetlands for all or part of their life cycle. Wetlands harbor a third of the country's endangered or threatened species of plants and animals.

2,000 species of fish require wetland habitats for spawning, feeding, and protection from predators.

150 species of birds are attracted to wetlands as sources of food and sites for resting, nesting, and feeding.

# TRAIL EXPLORATION GUIDE MILL CREEK LOOP





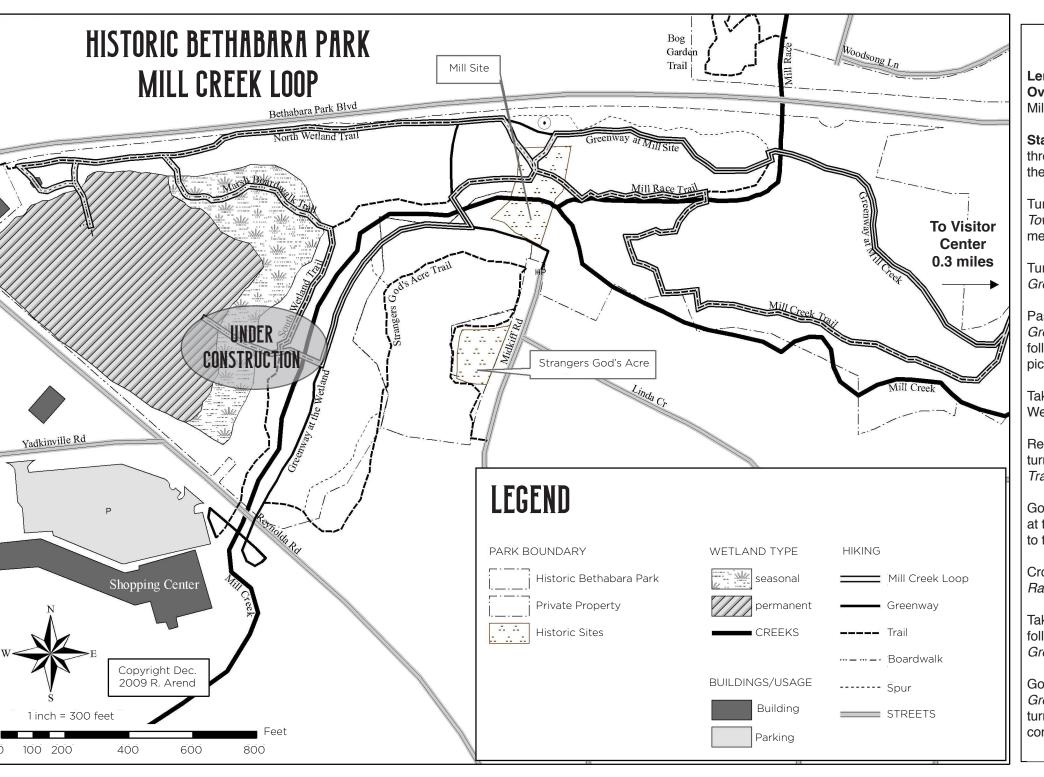
# THE GRIST MILL

Plans for the mechanical operation of the Bethabara Grist Mill have yet to be found. What we know about the mill is based on this 1756 drawing, diary entries, and other structures built by Hans Christensen, the architect of the mill.



Using these clues, we can hypothesize that the building was a half-timbered construction, three stories high, with a one story wing. The material between the timbers was likely wattle and daub (sticks or wooden lathes daubed with clay, gravel, and sand mixed with straw).

The mill structure straddled Mill Creek, anchored on each bank, with flood gates and a vertical water wheel positioned underneath. Today, stones from the mill's foundation can still be found in the bed of the creek on the Mill Creek Loop.



#### MILL CREEK LOOP

Length: 2.3 mi or 3.8 km
Overview: The loop takes you to the

Mill Site and then to the Wetland.

**Starting** at the Visitor Center proceed through the back of the Palisade Fort to the *Greenway*.

Turn **right** and follow the trail, cross *Old Town Drive*, and continue through the meadow trail to the bridge.

Turn **left** then **right**, following the *Greenway* to the Mill Site.

Passing the **mill stone** stay on the *Greenway* for 250 feet, then go **straight** following the *North Wetland Trail* to the picnic pavilion on the left.

Take the **Boardwalk** for a view of the Wetland.

Return to the *North Wetland Trail* and turn **right** onto the *Marsh Boardwalk Trail* reaching the *South Wetland Trail*.

Go back until you reach the *Greenway* at the Wetlands and turn **left** following it to the bridge.

Cross the bridge and turn **right** onto *Mill* Race Trail.

Take the little bridge on the **left** and follow *Mill Creek Trail* until reaching the *Greenway* turning **right**.

Go across **Old Town Dr.**, follow the *Greenway* down to the God's Acre sign, turn **left** towards the Palisade Fort, and continue on towards the Visitor Center.