



The Muscle Shoals



It is difficult to imagine the changes that have occurred to this landscape over millions of years. By studying the soils and stones of the land we know that entire mountain ranges have risen up and then been eroded away by wind and water. The Tennessee River Valley as we know it today has been carved out of the floor of an ancient sea.

This area's interior limestone plateau that extends northward into Tennessee is the final resting place of millions of marine organisms. Their fossilized bodies are the remnants left behind. Millions of years and billions of gallons of water from the Tennessee River have worn the surfaces of these remains, exposing them as the riverbed.

Slowly eroding upstream, a major fall line of the river was located at the Muscle Shoals. This infamous rapid once marked the upper limit of navigation on the Tennessee River. Now covered by the waters of Pickwick, Wilson and Wheeler Reservoirs, the Muscle Shoals once stretched for more than 20 miles. Only glimpses of these once impressive rapids can now be seen during periods of low water at the tailraces below the dams.



What's in a Name?

The truth is no one knows where the name Muscle Shoals came from or even when the area was first called Muscle Shoals. However, a few popular theories exist. One suggestion comes from the fact that at one time Muscle Shoals was thick with freshwater mussels that flourished knee-deep

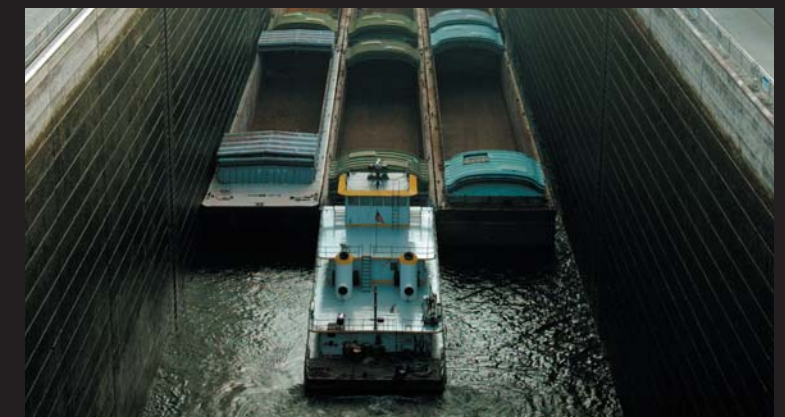
in the river. Others suggest that the name came from the shape of the river and its similarity to the muscles of the human arm. Yet another theory is that the name evolved from stories of Native Americans, which conveyed that the swift and strong waters of the shoals were difficult to pass and required a great deal of muscle to do so.



Mussel Shell Barges, c. 1915

Freshwater Mussels

Over two thirds of North America's freshwater mussel species are found in Alabama. With an incredible diversity and density of species it is no surprise that these mussels have great commercial value. Small segments of shells are used in the production of cultured pearls, making the Tennessee River Valley the most important source of commercial mussels in the world. Unfortunately, one third of the freshwater mussels in Alabama are endangered.



Ship using TVA locks/ADCNR Photos

Taming the Shoals

On May 18, 1933, Congress passed the TVA Act which created the Tennessee Valley Authority. The TVA Act started an impressive series of engineering feats that tamed the shoals with several hydroelectric dams and a network of locks and canals that finally allowed ships to navigate the Tennessee River from the Mississippi River to Chattanooga, Tennessee.